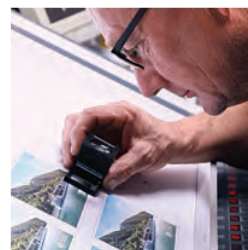




UV Curing System

No.1
FOR
LED
UV

Transform your offset press
with the most effective
LED UV curing technology



...engineering UV

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Why use GEW LED UV?

Print on plastics

LED UV polymer inks allow successful printing on almost all stock types as they will adhere well to non-absorbent materials like PE, PET, PU, synthetic paper etc.

LED UV brings added value, increased product diversity and new product offerings with coated and uncoated papers, plastics and foil laminated sheets.

Sharper dots and vibrant colours

GEW's LEDs achieve sharper dots, more vibrant colours and a better quality finished product.

No more marking and scratching, no more sealer

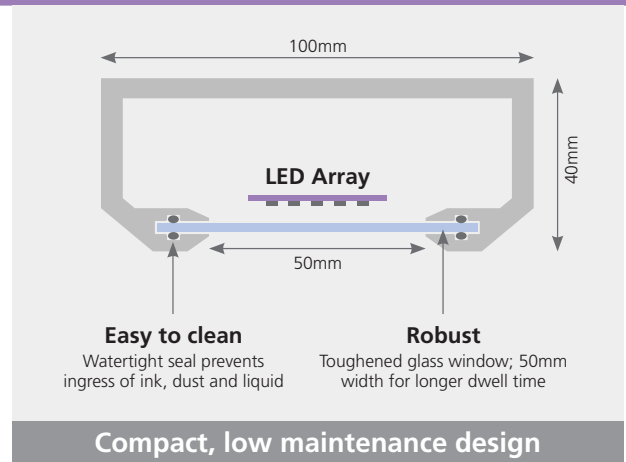
LED UV inks and varnishes are 100% cured directly after the LED lamp. As inks are dried instantly, marking of sheets in the delivery or during the perfecting process is eliminated. The ink dries to a durable polymer which withstands solvents and abrasion throughout the lifetime of the product. As a result, machine varnish or sealer is no longer necessary.

Eliminate spray powder

LED UV curing avoids the need for spray powder on the machine. This eliminates the widespread contamination and associated time-consuming cleaning and maintenance while creating a cleaner work environment.

Instant drying for faster job turnaround

Instant drying of inks enables immediate finishing and much faster despatch of jobs. Sheets can be folded, cut, bound and further processed right away, reducing work-in-progress and significantly shortening lead-times to customers.



No heat

Unlike H-UV or traditional mercury lamps, LEDs emit very little infrared heat towards the substrate.

This avoids common heat-related issues in printing such as high pile temperatures, curling of heat-sensitive stock materials and loss of moisture in paper: printed sheets are crisp and fresh as new.

The low heat profile of GEW LEDs means fire risk, costly shielding and preparation of print units is avoided.

More cost effective than H-UV

Instant on-off switching means that with LED no energy is consumed when the press is idle. The higher electrical efficiency of LEDs and the purity of the UV output allow typical energy savings in excess of 50% compared with an H-UV lamp system.

100% UV uptime

The printer never waits for the UV lamps because GEW's LEDs' instant on-off switching means no warm-up or cool-down cycles. Mechanical maintenance time is eliminated because no lamps, shutters or reflector mechanisms require servicing.

Charlie Anderson

Managing Director, C & D Print Media, England

Using GEW LED UV on a Heidelberg SM74 press

"Instant drying means that we can follow on with any finishing process immediately after printing. It's one of those things... you wonder how you ever got along without it."



Transform your offset press



Also available configured for web presses

GEW LeoLED UV curing

GEW's LeoLED lamphead is the most effective LED UV solution on the market.

- Highest UV dose supports the fastest printing speeds
- Compact design fits almost all press types
- LED array is fully sealed from environment for easy cleaning and resilience to ink and dust ingress
- Direct UV irradiation path means no UV is lost in reflections
- Movable between print units
- Continuous remote monitoring of lamp/LED characteristics ensures the most reliable operation and fastest support of any manufacturer
- Uniform UV output and wavelength across the curing area
- Long-term consistent output over the full life cycle of the LEDs

Specification

Peak wavelength	395nm*
UV irradiance	25W/cm ² **
Electrical power	88W/cm
Width	To suit all machines
Emitting window width	50mm
Operating temperature	5 to 40°C (41 to 104°F)
Operating humidity	Non-condensing
Durability	In excess of 20,000h
Cooling	Water

* Other wavelengths available on request ** Measured at window



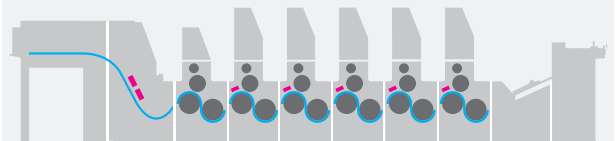
Modular Lamp Array (MLA)

The MLA is a customisable arrangement of LED mounting positions on a printing press.

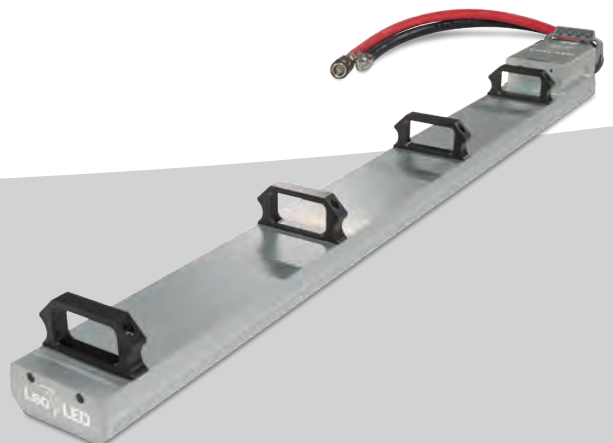
Lamps can be freely moved between any position to change curing configuration and adapt to the job at hand. For highly demanding applications (such as B1 LED coating at 18,000sph) multiple lamps can be placed in tandem at the end of the press.

This modular LeoLED configuration offers the ultimate in flexibility and enables GEW to deliver the highest energy dose in the market, at the best value.

Example lamphead mounting positions



Lampheads movable to any mounting position





Power supply

Fail-safe operation

Military-grade electronic design protects the UV system from damage caused by incorrect voltage, short-to-ground, dropped phases, mains spikes and lightning strikes. In the event of a serious mains disruption, the system powers down in a safe mode.

RHINO is designed to run in harshest conditions at ambient temperatures of up to 40°C. The system is also unaffected by dust, ink mist and other atmospheric contaminants.

Lowest operating costs

With intelligent power management the current draw from each mains phase is balanced and harmonic distortion is minimised, reducing the energy demand registered by your electricity meter.

Minimal footprint RHINO Rack

A compact cabinet that houses power supplies for up to 12 lamps and provides perfect cooling, atmospheric protection and mains power distribution.

Power supplies slide into the rack and connect quickly, enabling more lamps to be easily added to the system in future.

5 year warranty available

Using GEW's embedded service package gives total confidence in the reliability of GEW power electronics and minimises unplanned maintenance costs.

GEW is the only UV supplier to offer this level of warranty as standard.

Andree Bergman
Managing Director
Bergman Media, Netherlands

Using GEW LED UV on a Shinohara 75V press

"It's not just a system to upgrade your machine, it's a system that can upgrade your whole company."

Control panel

Embedded service

RHINO Control is connected to the internet and encrypted system performance data is sent live to GEW 24/7. This ensures the fastest and most precise response to service issues available in the industry.

System performance reports

Regular system performance reports are sent to nominated customer email accounts. These lay out energy usage, uptime % and a performance report to give unparalleled analysis of press productivity to operational management.



RHINO touch panel

Combined with the comprehensive instruction and service manuals available from GEW, your press operators will have total confidence in their new UV system.

The Event Log continually records system use and operating parameters.

The log can be checked to ensure the system is working at peak efficiency, avoiding energy waste and unplanned downtime.

Multilingual instructions are easily accessible on every screen ensuring operators can always fully understand the UV control.



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