



# LED UV systems Your ultravioLED specialIST

# IST LED UV



#### ... is economical:

- minimised processing time due to dry sheets
- long service life of LEDs
- no warm-up and cooling-down times, immediate availability
- no powder, extended cleaning intervals
- protective varnish is not required
- cost-saving due to format switching
- lower ink consumption compared to conventional printing inks

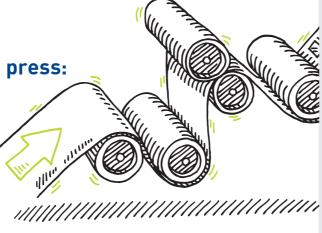


# ... also offers many benefits to newcomers:

- instant drying of inks and coatings
- no colour change
- brilliant print results, perfect gloss with inline coating
- higher mechanical resistance compared to oil-based colours
- solvent-free ink and coating systems
- easier and faster production on plastics, metallised and uncoated materials
- space and time saving: short processing times since no storage space required for drying time before further processing

# ... is suitable for retrofitting your printing press:

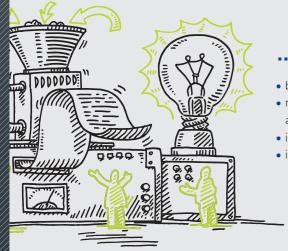
- lower investment
- quicker return on investment
- shorter installation times than other drying systems
- significant machine value increase due to retrofit
- successful certification and recertification to PSO/ISO 12647 possible



# protects the environment and conserves resources:

- no powder, ozone or mercury
- no extraction required
- LEDs can be switched on/off immediately, no energy use on stand-by
- minimum thermal impact on the substrate and the printing machine
- no additional warming of the printing room
- format switching and sheet clocking





### ... extends your range of applications:

- brilliant colours and high contrast on diverse substrates
- minimal heat transfer to the print substrate, ideal for synthetic and heat-sensitive substrates
- immediate processing, reduction of delivery times
- industry-leading modularity and expandability



Would you like to retrofit your existing press with the innovative LED technology?



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# LEDcure

# The high-performance LED system

IST METZ offers a completely new development of the LED product portfolio for a variety of different requirements. The water-cooled high-performance LED system LEDcure is the flagship of the new product range. The variable system ensures optimum matching to the various requirements of sheetfed and web presses. Newly developed optics consisting of lenses that are specially matched to the respective application provide optimum light output on the substrate. The systems are available in different wavelengths or as a mixed arrangement. Water-cooled LED chips ensure high efficiency and maximum service

## LEDcure - compact, modular, efficient

A clever modular concept combined with its extremely robust and compact design provides maximum flexibility and versatile application. The system is freely scalable in length and can be adapted to all machine formats and installation conditions. This makes it possible to use the LEDcure unit at different positions of a machine.

The new LEDcure provides a very high output at the standard distance of 50 mm and more to the substrate found in sheetfed offset printing. But it is not just the maximum irradiation intensity, the so-called peak, that matters. The wide irradiation field of the LEDcure provides extra drying time, also referred to as dose. This is often crucial for efficient curing of

LED inks and varnishes. A high peak and a high dose provide increased flexibility in the formulation of inks and varnishes.

### **LEDcure features**

# XT8-Booster:

The new LEDcure completes the fully revised LED range of solutions offered by IST together with its sister company IST INTECH. Increasingly, synergy effects have been created between the two companies; the XT8-Booster is just one example. The booster technology XT8 means that LEDcure has up to 30 % more power than conventional LED systems. At the same time, LED chips are spared, service life is increased and the chips are protected from outside influences.

#### Deep Cure Optik:

// U \ The extremely powerful LED system not only boasts optimum values for surface curing, it also en- thereby providing superior sures trouble-free curing at much greater distances and maximum machine speeds. The specially developed Deep Cure Optics enhances saturation of the entire ink and varnish coating and offers highly efficient deep curing.

#### XChange:

The new XChange concept facilitates an immediate on-site replacement, service conditions with minimum downtimes. Thanks to the XChange concept, the LEDcure is the most flexible and future-proof LED system on the market. It allows for combined operation with different wavelengths, a subsequent performance upgrade and adjustment of the optics when switching over to another machine.

#### XFine – optimised format adaption:

tion, the irradiation field can be adjusted in increments of 30 mm. Optionally, the new LEDcure also offers an adjustment in 15 mm incre-

### Xtra Energy:

At a distance of 70

Thanks to the format adap- mm to the substrate, the LEDcure offers an irradiance of 13 W/cm<sup>2</sup>. The bundling of the individual LED beams is realised perfectly so that it produces a wide irradiation field of uniformly high intensity. This is associated with a high radiation dose, which is decisive for curing the LED inks and coatings, even at high machine speeds.

# Our additional LED portfolio from STINTECH UV LED CURING SPECIALISTS



#### PINCURE Z 3W/CM<sup>2</sup> UV LED



Pincure Z UV LED offers a powerful solution in a compact and lightweight package for ultimate high speed pinning between inkjet print heads. The air cooling exhaust is from the top of the lamp head and away from any adjacent print heads.

Wavelength	395nm (Std), 365nm, 385nm, 405nm
Power	3 W/cm²

Dimensions (LxWxH) 80mm/120mm x 20mm x 234mm



**Z SERIES (AIRCOOLED)** 

#### MZ 6W/CM<sup>2</sup> UV LED



R&D developments have provided IST INTECH with an industry leading compact, cost effective yet Power high performance air cooled UV LED solution; the MZ. Specifically targeted at small to medium wide format graphics printers and digital industrial markets.

Wavelength

385nm, 405nm, Mixed

395nm (Std), 365nm,

6W/cm<sup>2</sup>\*

Dimensions (LxWxH)

30mm x 82mm x 120mm, 30mm x 162mm x 120mm



Z SERIES (AIRCOOLED)

\* @395nm measured at the emitting window using

#### SZ 14W/CM<sup>2</sup> UV LED



IST INTECH introduces the next generation of its UV LED family the SZ. With upto 14 w/cm² peak irradiance and a lightweight construction, the SZ LEDcure has been specifically designed for the Wide Format Printing industry.

Wavelength	395nm (std), 405nm, 385nm, 365nm
ower .	14w/cm²

Dimensions (LxWxH)

90mm/540mm x 86mm x 202mm



**Z SERIES (AIRCOOLED)** 

Z SERIES (AIRCOOLED)

#### VZ 16W/CM<sup>2</sup> UV LED



VZ LEDcure is specifically designed for the needs of the Super Wide and Grand Format Printing industry with 16W/cm<sup>2</sup> output, and 20% more dose than it's sister product the SZ. Over the years the SubZero and VZero products have been established as some of the world's leading UV curing systems for inkjet applications.

Wavelength	395nm (std), 405nm, 385nm, 365nm
Power	16w/cm²
Dimensions (LxWxH)	Xmm x 86mm x 202mm

### VZX 22W/CM<sup>2</sup> UV LED



The VZX is a groundbreaking innovation with 22W/cm² of super high dose UV output bringing air cooled LED technology into the domain only previously possible with water cooling techniques. The VZX is especially suited to high speed single pass applications in graphics or industrial applications.

	Wavelength	395nm (std), 405nm, 385nm, 365nm
	Power	22w/cm²
h	Dimensions (LxWxH)	Xmm x 116mm x 202mm

+ HYBRID CURING OPTION

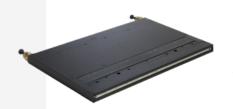
like Excimer, Inertisation or lamp systems

can be used in combination with otherIST Technologies



Z SERIES (AIRCOOLED)

#### PINCURE C 3.5W/CM<sup>2</sup>, 10W/CM<sup>2</sup> UV LED



Pincure C & CX UV LED offers a powerful solution in a compact water cooled package for ultimate high speed pinning between inkjet print heads.

	Wavelength	395nm (Std), 365nm, 385nm, 405nm
	Power	C - 3.5 W/cm²*, CX - 10 W/cm²* XT8 technology
e t	Dimensions (LxWxH)	C 20 x 148 / 40 (in Steps) CX 20 x 250 / 30 (in Steps



C SERIES (WATERCOOLED)

\* @395nm measured at the emitting window using an EIT Power Map UVV sensor

#### NC 20W/CM<sup>2</sup>, 30W/CM<sup>2</sup> UV LED



The NC Series is specially designed for extremely small integration spaces with high power requirements and is the first choice when especially powerful Pinning or full curing is needed. Slim and compact architecture enables easy integration while the water cooled feature will provide precision high output.

		C SERIES (WATERCOOLED)
4	Dimensions (LxWxH)	20mm x 190mm
r	Power	20W/cm²*
	Wavelength	395nm (Std), 365nm, 385nm, 405nm and mixed wavelengths

\* @395nm measured at the emitting window using an EIT Power Map UVV sensor

#### SC 20W/CM<sup>2</sup>, 28W/CM<sup>2</sup> UV LED



SC series with its class leading dose and unmatched linearity of output can surpass any other water cooled unit of this type. Slim and ultra compact architecture enables easy integration while the water cooled feature will provide precision high output.

Wavelength	395nm (Std), 365nm, 385nm, 405nm and mixed wavelengths
Power	20W/cm²*
Dimensions (LxWxH)	43mm x 162mm

C SERIES (WATERCOOLED) \* @395nm measured at the emitting window using





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