

# MultiDX!

The All-Rounder for High Demands



BASED ON INNOVATION.

## Advantages of the Unique Lüscher Laser Diode Technology

- PROVEN AND PATENTED TECHNOLOGY MADE IN SWITZERLAND
- MAINTENANCE-FREE FIBRE COUPLED LASER DIODE TECHNOLOGY
- FULLY AUTOMATIC CALIBRATION OF LASER DIODES PRIOR TO EVERY IMAGING CYCLE
- ULTRA-LONG LIFETIME OF THE LASER DIODES WITH +20'000 IMAGING HOURS
- POSSIBLE TO UPGRADE WITH ADDITIONAL LASER DIODES AT ANYTIME FOR FASTER IMAGING SPEED
- HIGHEST ENERGY OUTPUT DUE TO HI-ENERGY LASER DIODES
- NO ACTIVE COOLING SYSTEM REQUIRED
- NO CONSUMABLES
- OPERATES NEARLY MAINTENANCE-FREE
- LOW ENERGY CONSUMPTION, LOWEST COST OF OWNERSHIP

## Advantages of the MultiDX!

- UNIQUE HYBRID TECHNOLOGY
- CUSTOM-BUILT REGISTERING SYSTEM
- ALL IN ONE SYSTEM
- FLATBED SYSTEM FOR EASIEST HANDLING
- DYNAMIC AUTOFOCUS



## Technical Specifications of the MultiDX!

<b>UV</b>	<b>MultiDX! 320</b>	<b>MultiDX! 340 / 340L</b>
Laser type	UV, 405 nm / UV, 380 nm	UV, 405 nm / UV, 380 nm
Number of laser diodes	16, 32, 48, 64, 96 or 128	16, 32, 48, 64, 96 or 128

<b>T-Flex</b>	<b>MultiDX! 320</b>	<b>MultiDX! 340 / 340L</b>
Laser type	TH, 830 nm	TH, 830 nm
Number of laser diodes	16, 32, 64, 128	16, 32, 64, 128

<b>Flex</b>	<b>MultiDX! 320</b>	<b>MultiDX! 340 / 340L</b>
Laser type	TH, 980 nm	TH, 980 nm
Number of laser diodes	16, 32, 48 or 64	16, 32, 48 or 64

<b>UV-Flex</b>	<b>MultiDX! 320</b>	<b>MultiDX! 340 / 340L</b>
Laser type	UV, 405 nm and TH, 830 nm / TH, 980 nm	UV, 405 nm and TH, 830 nm / TH, 980 nm
Number of laser diodes	Combination upon request	Combination upon request

<b>General Information</b>	<b>MultiDX! 320</b>	<b>MultiDX! 340 / 340L</b>
Maximum exposure area (W x D)	900 x 710 mm* (35.4 x 27.95 inch)	1'300 x 1'100 mm (51.2 x 43.3 inch)    1'440 x 1'320 mm (56.7 x 52.0 inch)
Maximum outside format of screen frame (W x D)	1'000 x 1'000 mm (39.3 x 39.3 inch)	1'300 x 1'100 mm (51.2 x 43.3 inch)    1'500 x 1'450 mm (59.0 x 57.1 inch)
Resolutions	2'400 / 2'540 / 4'800 / 5'080 / 9'600 / 10'160 / 20'320 dpi	2'400 / 2'540 / 4'800 / 5'080 dpi
Dimensions (L x W x H)	1'994 x 1'609 x 1'378 mm (78.5 x 63.3 x 54.3 inch)	3'178 x 2'169 x 1'487 mm (125.1 x 85.4 x 58.5 inch)
Weight	750 kgs (1'653.5 lbs)	1'950 kgs (4'299.0 lbs)
Power supply	230 V / 50 – 60 Hz / 16 A	
Power consumption	ca. 0.5 / 0.8 kW with exhaust	
Ambient conditions	50 – 65% humidity at 18 – 25° C (64.4 – 77°)	
Room conditions	yellow light, vibration-free floor**	

\* 1'000 x 710 mm (39.4 x 27.95 inch) speed reduction

\*\* only for UV

# Universal Flatbed Computer-to-Screen (CtS) and Computer-to-Plate (CtP) System

## Lüscher Laser Diode Technology

The fibre-coupled laser diodes operates in different wavelengths and are characterised by an ultra-long service life of +20'000 imaging hours. They are completely maintenance-free, no need for active cooling system.

## Fully Automatic Calibration

Prior to every imaging, the system checks the default laser diodes settings relating to the material to be imaged and automatically checks and calibrates the laser diode if necessary. This guarantees consistent quality and eliminates imaging errors.

## Nearly Maintenance-free

MultiDX! does not require any consumables such as MH lamps / UV lamps / LED's or DMD chip. Lüscher maintenance software guides the operator through the simple maintenance tasks and guarantees high reliability. MultiDX! is equipped with a port for Remote Support Service, which can be directly linked to our technical support via internet.

## Lowest Energy Consumption

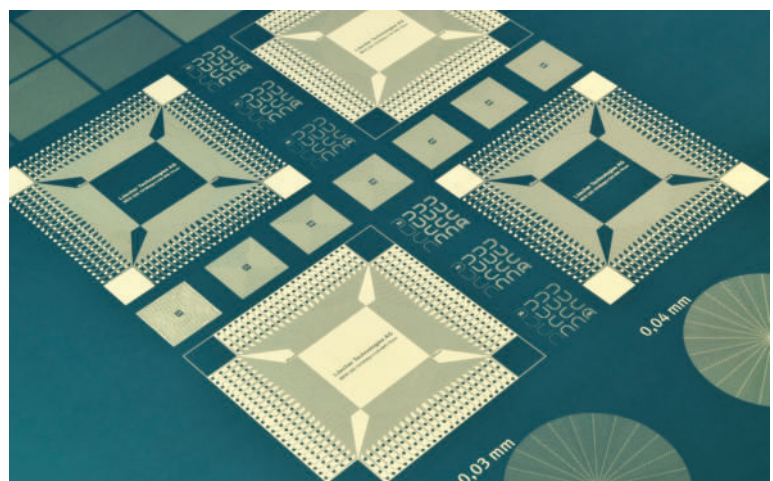
Lüscher's unique laser diode technology guarantees extremely low power consumption of 0.05 – 0.5 kW, depending on laser diodes and lowest cost of ownership. This helps the customer to achieve environmental-friendly production.

## Unique Hybrid Technology, a Milestone in Imaging Possibilities

In several applications, a combination of different printing methods using various printing forms is being applied. Traditionally, at least two different CtP systems would be necessary to meet this requirement. MultiDX! with its hybrid technology combines up to four different laser diodes allowing any printing form to be imaged in one machine. Offset plates, flexo plates, letterpress plates, embossing clichés, flat screens as well as rotary screens, such as Screeny® by Gallus, TecScreen® by Kocher + Beck or RotaPlate® by spg can be processed.

## Custom-built Registering System

The flatbed layout of MultiDX! allows the integration of custom-built registering systems for perfect alignment of the image on the printing form. As a result, the setup time in the printing press is substantially reduced, which leads to significant savings in terms of material and cost.



# Applications

## **Label Printing**

Using the hybrid technology, MultiDX! can image any kind of printing form in one machine: flexo, letterpress and offset plates, flat screens as well as rotary screens, such as Screeny® by Gallus, TecScreen® by Kocher + Beck or RotaPlate® by spg. The integrated Dual Resolution Optics with 2'540 and 5'080 dpi also covers Full HD Flexo printing.

## **Embossing with Copper and Magnesium Cliches**

Copper or magnesium cliches with photoresist for embossing in any thickness can be imaged with UV laser diodes in ultimate precision.

## **Flat and Rotary Screen Printing**

Flat or rotary screens are exposed easily and at highest precision with UV laser diodes. Any common steel or polyester mesh can be processed. And at all times, the machine has enough power capacity to cure thick layers to allow trouble-free printing.

## **Printing on Cans, Cups and Tubes**

Various printing forms for almost any printing method using cylindrical shapes can be imaged: waterless offset printing plates, flexo and letterpress plates as well as flat or rotary printing screens.

## **Pad Printing Applications**

Steel or polymer cliches for pad printing can be imaged by MultiDX! in any thickness. The printing form is either exposed with UV lasers (photoresist) or ablated with infrared lasers (polymer) at highest precision.

## **Industrial Screen Printing**

For industrial screen printing, MultiDX! 320 and 340 can be equipped with optics at a resolution of up to 20'320 dpi, also in dual resolution if requested. Printing screens with lines of up to 20 microns can be produced at ease.

## **Other Applications**

- Glass Printing
- Packaging
- Printed Electronics
- Displays, Sensors, Membrane switch & Overlays
- Whitegoods
- Printed Circuit Boards, Photovoltaics Applications





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