MultiDX!

The All-Rounder for High Demands

BASED ON INNOVATION.

luscher
Technologies

One for All

THE UNIVERSAL FLATBED IMAGESETTER

WITH MULTIDX! 320 AND 340 WE HAVE ENHANCED AND EQUIPPED OUR FLATBED IMAGESETTER WITH STATE-OF-THE-ART TECHNOLOGY. THE MOST IMPORTANT FEATURE OF THE NEW LAYOUT IS THE FACT THAT THE MULTIDX! 320 CAN BE EQUIPPED WITH TWICE THE AMOUNT OF LASERS.

Maximum Productivity

Due to its flatbed layout, almost any flexible and inflexible printing form can be imaged in highest quality at a resolution of up to 10’160 dpi. And doubling the number of lasers means increasing the productivity by 100%.

Steady Exposure Quality

Prior to every exposure, a laser sensor checks all lasers and readjusts them if necessary. This guarantees an absolutely steady quality during the entire exposure. And prior to every exposure, the dynamic auto focus system compensates any unevenness of the plate material during the exposure by measuring the plate material and by calibrating the optics accordingly.

Low Power Consumption

The revised control system makes operating easier and more user-friendly. And last but not least: the average power consumption has come down to less than 1 kWh.

Unlimited

A Milestone in Imaging Technology

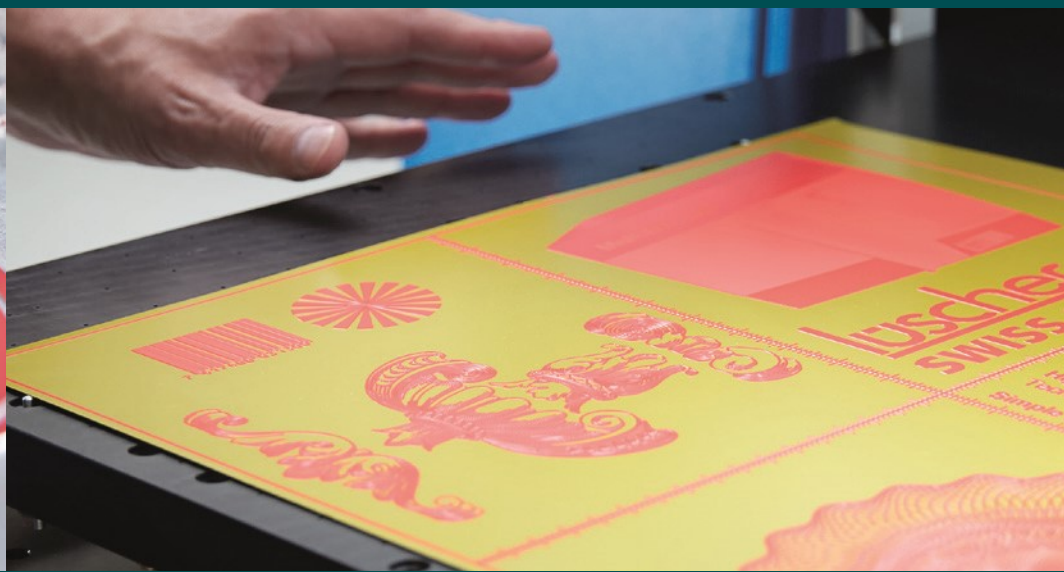
Lüscher is the first manufacturer worldwide having developed an image setter that combines two different types of lasers in one machine. Whether thermally crosslinking polymers, polymers with ablative layers (LAMS), UV photosensitive emulsions or UV crosslinking polymers are in use: MultiDX! is equipped with fibre-coupled laser diodes in the required wavelength (nm). The number of laser diodes depends on the exposure performance required by the customer. An on-site upgrade to increase the output performance can be made anytime.

Universal Direct Imaging

Printing forms with steel, aluminum or polyester bases can be imaged in any size, shape and thickness. The printing form remains static during the exposure. For this reason, balancing problems as they may occur with external drum systems as far as variable thickness and size are concerned, are no longer an issue with MultiDX!.

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

Unique Hybrid Technology

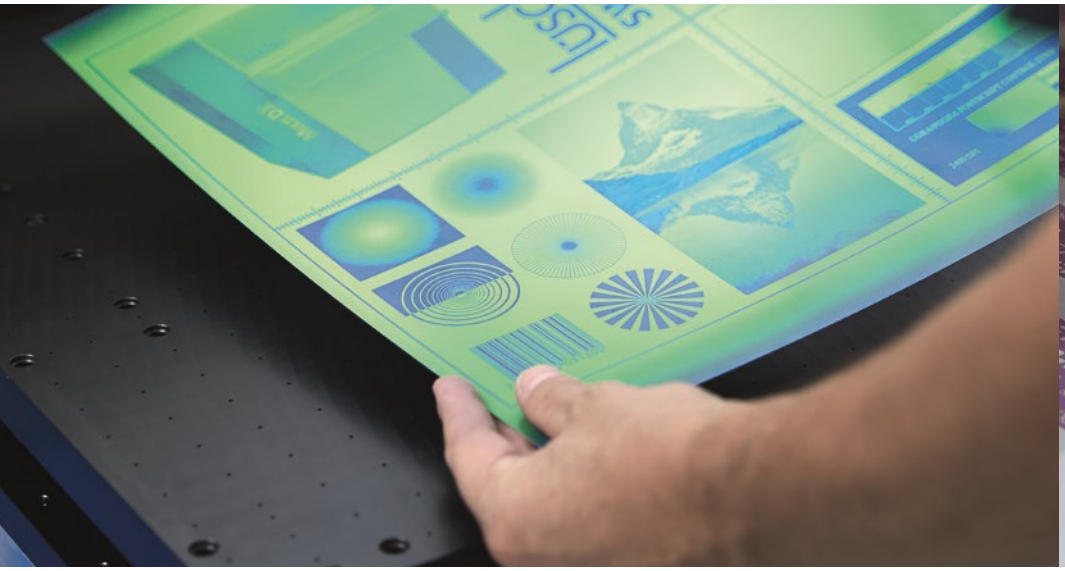
In a number of fields, such as the label printing industry, a combination of different printing methods using various printing forms is being applied. Traditionally, at least two different CtP systems would be necessary to meet this requirement. MultiDX! with its hybrid technology combines two laser technologies with variable wavelengths (e.g. 405 nm UV and 940 nm IR) allowing any printing form to be exposed in one machine. Offset plates, flexo and letterpress plates and printing screens can now be processed in the same printing press (Gallus, Mark Andy, Nilpeter and others). Switching between the wavelengths is made by a simple click of a button. Nothing could be easier.

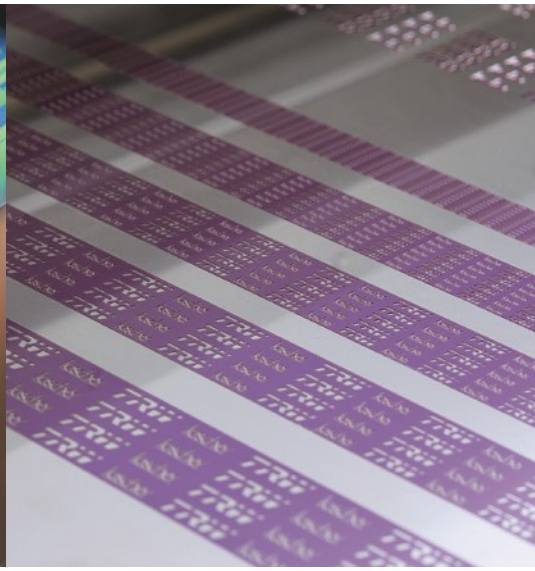
Label Printing

Using the hybrid technology, MultiDX! can image any kind of printing form in one machine: flexo, letterpress and offset plates as well as flat or rotary screens (Gallus, Tecno Screen® by Kocher + Beck or Stork RotaPlate®). The integrated Dual Resolution Optics with 2540 and 5080 dpi also covers Full HD Flexo printing.

Embossing with Copper and Magnesium Cliches

Copper or magnesium cliches for embossing in any thickness can exposed with UV lasers (etch resist) in ultimate precision.





Flat and Rotary Screen Printing

Flat or rotary screens are exposed easily and at highest precision with UV lasers. 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

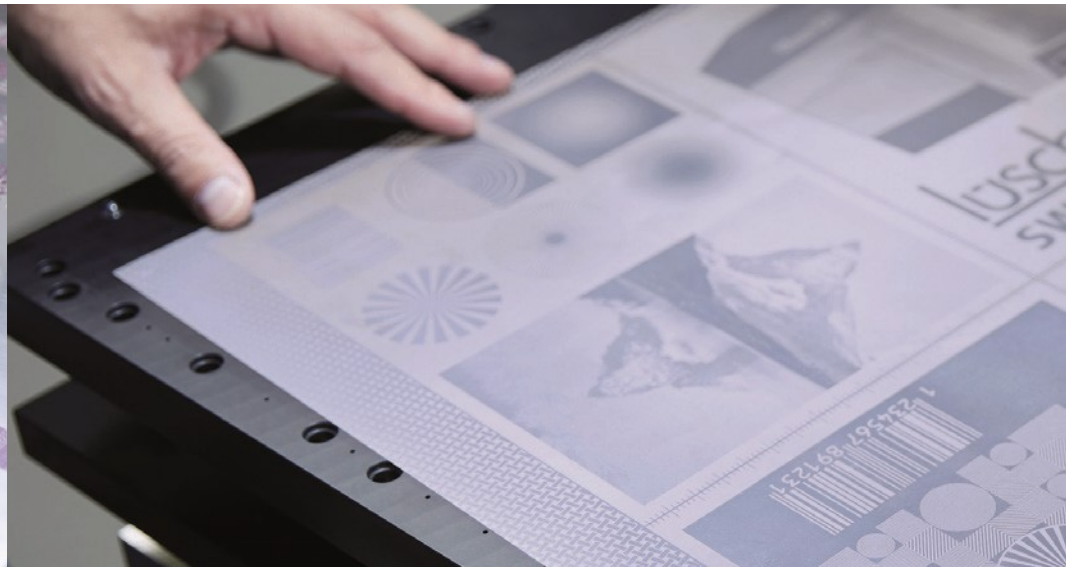
Various printing forms for almost any printing method using cylindrical shapes can be imaged: waterless offset printing plates, flexo and letterpress plates as well as flat or rotary printing screens.

Pad Printing

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

Industrial Printing

For industrial printing, MultiDX! 320 and 340 can be equipped with optics at a resolution of up to 10’160 dpi, also in dual resolution if requested. Printing screens or flexo printing plates with lines of up to 20 microns can be produced at ease.



Technical Specifications

UV	MultiDX! 320
Laser type	UV, 405 nm / UV, 375 nm
Number of laser diodes	16, 32, 48, 64, 96 or 128

TH	MultiDX! 320
Laser type	TH, 830 nm
Number of laser diodes	16, 32, 48 or 64

Flex	MultiDX! 320
Laser type	TH, 940 nm
Number of laser diodes	16, 32, 48 or 64

UV-Flex	MultiDX! 320
Laser type	UV, 405 nm / UV, 375 nm and TH, 830 nm / TH, 940 nm
Number of laser diodes	Combination upon request

General Information	MultiDX! 320
Maximum exposure area	900 x 610 mm (35.4 x 24.0 inch)
Maximum outside format of screen frame	1000 x 1000 mm (39.3 x 39.3 inch)
Resolutions	1200 / 2400 / 2540 / 4800 / 5080 / 9600 / 10'160 dpi
Auto Focus, dynamic focus	optional
Dimensions (L x W x H)	1994 x 1609 x 1378 mm (78.5 x 63.3 x 54.3 inch)
Weight	750 kgs (1653.5 lbs)
Power supply	230 V / 50 – 60 Hz / 16 A
Power consumption	ca. 0.5 / 0.8 kWh with exhaust
Ambient conditions	50 – 65% humidity at 18 – 25° C (64.4 – 77°)

MultiDX! 340	MultiDX! 340L
UV, 405 nm / UV, 375 nm	UV, 405 nm / UV, 375 nm
16, 32, 48, 64, 96 or 128	16, 32, 48, 64, 96 or 128

MultiDX! 340	MultiDX! 340L
TH, 830 nm	TH, 830 nm
16, 32, 48 or 64	16, 32, 48 or 64

MultiDX! 340	MultiDX! 340L
TH, 940 nm	TH, 940 nm
16, 32, 48 or 64	16, 32, 48 or 64

MultiDX! 340	MultiDX! 340L
UV, 405 nm / UV, 375 nm and TH, 830 nm / TH, 940 nm	UV, 405 nm / UV, 375 nm and TH, 830 nm / TH, 940 nm
Combination upon request	Combination upon request

MultiDX! 340	MultiDX! 340L
1300 x 1100 mm (51.2 x 43.3 inch)	1440 x 1320 mm (56.7 x 52.0 inch)
1300 x 1100 mm (51.2 x 43.3 inch)	1500 x 1450 mm (59.0 x 57.1 inch)
1200 / 2400 / 2540 / 4800 / 5080 dpi	1200 / 2400 / 2540 / 4800 / 5080 dpi
optional	optional
3178 x 2169 x 1487 mm (125.1 x 85.4 x 58.5 inch)	3178 x 2169 x 1487 mm (125.1 x 85.4 x 58.5 inch)
1950 kgs (4299.0 lbs)	2000 kgs (4409.2 lbs)
230 V / 50 – 60 Hz / 16 A	230 V / 50 – 60 Hz / 16 A
ca. 0.5 / 0.8 kWh with exhaust	ca. 0.5 / 0.8 kWh with exhaust
50 – 65% humidity at 18 – 25° C (64.4 – 77°)	50 – 65% humidity at 18 – 25° C (64.4 – 77°)

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