

MultiDX!

The All-Rounder for High Demands



BASED ON INNOVATION.

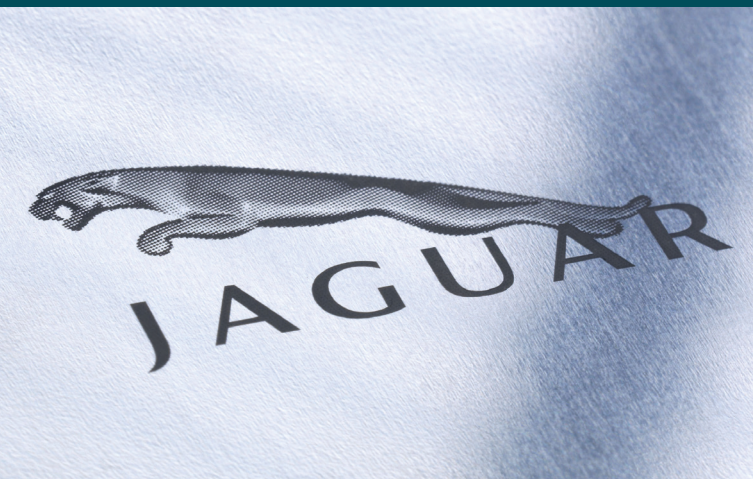
luscher
Technologies

Advantages of the Patented Lüscher Laser Diode Technology

- PROVEN AND TRUSTED TECHNOLOGY MADE IN SWITZERLAND
- MAINTENANCE-FREE FIBER-OPTIC COUPLED LASER DIODE TECHNOLOGY
- FULLY AUTOMATIC CALIBRATION OF LASER DIODES
- ULTRA-LONG LIFESPAN OF THE LASER DIODES WITH +20'000 IMAGING HOURS
- UPGRADEABLE- ADDITIONAL LASER DIODES CAN BE ADDED AT ANY TIME FOR FASTER IMAGING SPEED
- HIGH-ENERGY LASER DIODES FOR MAXIMUM ENERGY OUTPUT, NO ACTIVE COOLING SYSTEM REQUIRED
- NO CONSUMABLES
- OPERATES VIRTUALLY MAINTENANCE-FREE
- LOW ENERGY CONSUMPTION, LOWEST COST OF OWNERSHIP

Advantages of the MultiDX!

- UNIQUE HYBRID TECHNOLOGY
- CUSTOM-BUILT REGISTER SYSTEM
- ALL-IN-ONE SYSTEM
- FLATBED SYSTEM FOR EASY HANDLING
- DYNAMIC AUTOFOCUS



Pad Printing Plate



Embossing Cliché

Technical Specifications of the MultiDX!

MachineType	Laser Type	Number of Laser Diodes
MultiDX! 320 UV MultiDX! 340 UV MultiDX! 340L UV	UV, 405 nm / UV, 380 nm	16 / 32 / 48 / 64 / 96 / 128
MultiDX! 320 T-Flex MultiDX! 340 T-Flex MultiDX! 340L T-Flex	TH, 830 nm	16 / 32 / 64 / 128
MultiDX! 320 Flex MultiDX! 340 Flex MultiDX! 340L Flex	TH, 980 nm	16 / 32 / 48 / 64
MultiDX! 320 UV-Flex MultiDX! 340 UV-Flex MultiDX! 340L UV-Flex	UV, 405 nm andTH, 830 nm / TH, 980 nm	Combination upon request

General Information of the MultiDX!

Feature	MultiDX! 320	MultiDX! 340	MultiDX! 340L
Max. Imaging Area (L x W)	900 x 710 mm* (35.4 x 28.0 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)
Max. Frame Size (L x W)	1'000 x 1'000 mm (39.4 x 39.4 inch)	1'300 x 1'100 mm (51.2 x 43.3 inch)	1'500 x 1'450 mm (59.1 x 57.1 inch)
Machine 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)	3'178 x 2'169 x 1'487 mm (125.1 x 85.4 x 58.5 inch)
Weight	750 kg (1'653 lb)	1'950 kg (4'299 lb)	1'950 kg (4'299 lb)
Resolution	2'400 / 2'540 / 4'800 / 5'080 / 9'600 / 10'160 / 20'320 dpi	2'400 / 2'540 / 4'800 / 5'080 / 9'600 / 10'160 / 20'320 dpi	2'400 / 2'540 / 4'800 / 5'080 / 9'600 / 10'160 / 20'320 dpi
Power Supply	230V / 50 - 60 Hz / 16 A	230V / 50 - 60 Hz / 16 A	230V / 50 - 60 Hz / 16 A
Power Consumption	approx. 0.5 kW / approx. 0.8 kW with extraction system	approx. 0.5 kW / approx. 0.8 kW with extraction system	approx. 0.5 kW / approx. 0.8 kW with extraction system
Ambient Conditions	40 - 65 % humidity at 18 - 25 °C (64.4 - 77 °F)	40 - 65 % humidity at 18 - 25 °C (64.4 - 77 °F)	40 - 65 % humidity at 18 - 25 °C (64.4 - 77 °F)
Room Conditions	yellow light**, vibration-free floor	yellow light**, vibration-free floor	yellow light**, vibration-free floor

*1'000 x 710 mm (39.4 x 28.0 inch) speed reduction

**only for UV

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

Lüscher's Laser Diode Technology

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

Fully Automatic Calibration

Prior to each imaging, the system checks the default settings of the laser diodes in relation to the emulsion to be imaged and automatically checks and calibrates the laser diode if necessary. This guarantees consistent quality and eliminates image errors.

Lowest Energy Consumption

Lüscher's patented laser diode technology ensures minimal power usage of 0.8 kW, depending on laser type, reducing costs and providing a lower total cost of ownership. This promotes environmentally friendly production for customers.

Virtually Maintenance-free

MultiDX! does not require any consumables such as MH lamps, UV lamps, LEDs or DMD chips.

Lüscher's 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 the internet.

Unique Hybrid Technology, a Milestone in Imaging Possibilities

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

Custom-built Register System

The flatbed layout of MultiDX! allows the integration of custom-built register 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.



Flat Screen



Rotary Screen

Applications

Label Printing

Using 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 SPGPrints. The integrated dual resolution optics with 2'540 and 5'080 dpi also covers full HD flexo printing.

Embossing with Copper and Magnesium Clichés

Copper or magnesium clichés 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 imaged easily and with the 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 clichés for pad printing can be imaged by MultiDX! in any thickness. The printing form is either imaged with UV lasers (photoresist) or ablated with infrared lasers (polymer) at the highest precision.

Industrial Screen Printing

For industrial screen printing, MultiDX! 320 and MultiDX! 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 with ease.

Other Applications

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



Offset Plate



Flexo Plate



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