MPRINT

a KURZ company

mlabel®

Digital Label Printing Systems - economical and flexible

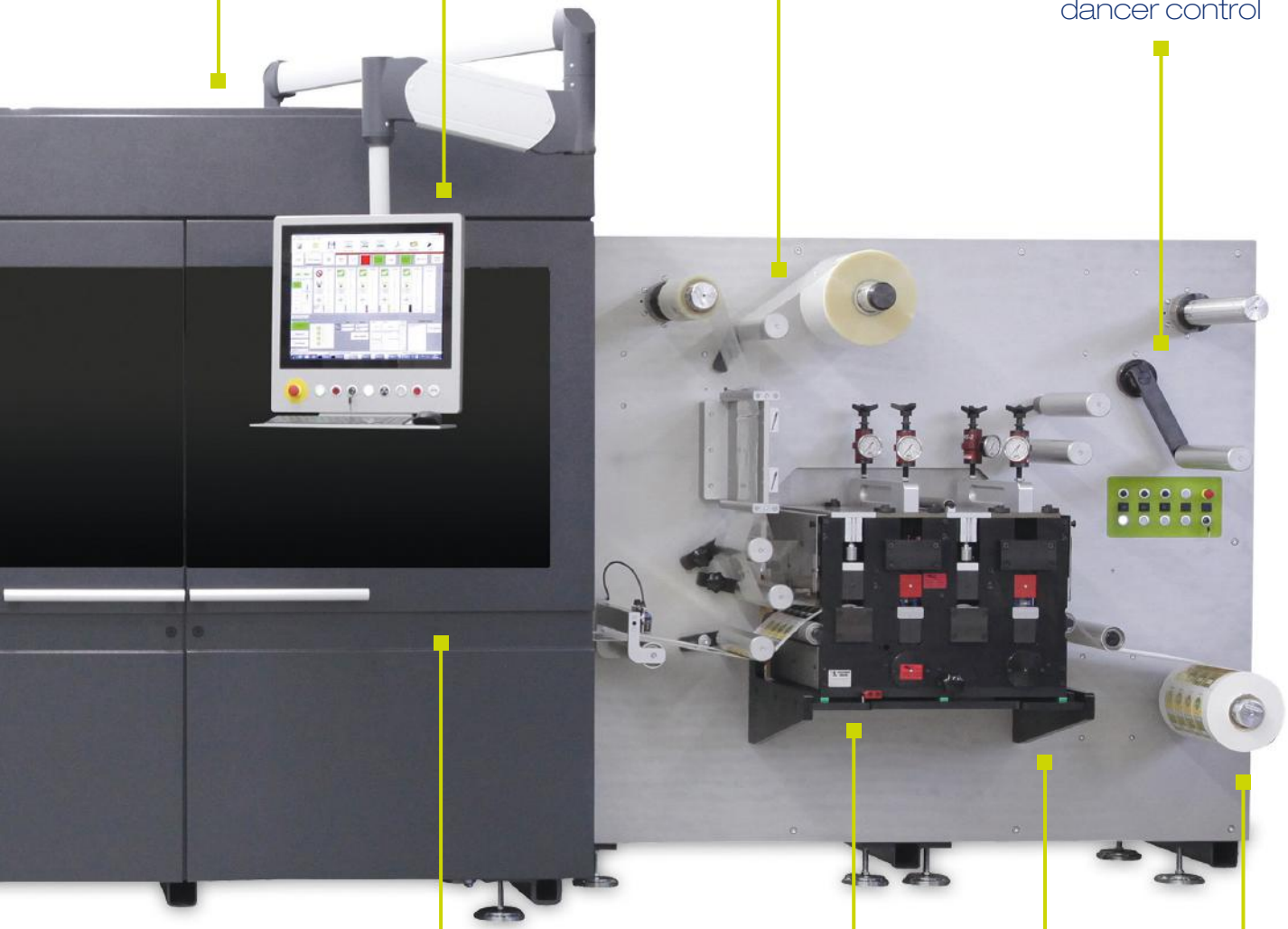
web guide with splice table and web clamps

web cleaner with ionization

KURZ DM-JETLINER embellishment module

Corona pretreatment

material unwind with web tension control for roll diameters up to 700 mm


Inkjet print module with
UV LED curing system
Central
operating panel
Laminate unit with
splice table
Matrix rewind with
dancer control
Variable sheeter with
separate servo drive
Web feed
Nip roller
Die cutting unit with
re-registration
Material rewind
Sheet delivery optional

mlabel® – quality and efficiency

The digital printing specialist from the Black Forest consequently advanced the uniquely modular concept of the mlabel® label printing system: with a print width of 324 millimeters and individual modules for a completely adaptable and fully digital production process – all from a single source.

The system: even more powerful

At the core of the mlabel® is the new MPRINT print module. With up to six colors and print widths of 324 mm it fits all applications.

- Print width: 324 mm
- State of the art print head technology with 600 x 600 dpi native resolution, due to the use of Greylevel printheads, the optical resultion is higher
- Automatic print head cleaning system with ink reclaiming
- One piece Aluminum print table for minimized vibrations of machine and web and therefore excellent printing results

Integrated full digital embellishment

The DM-JETLINER embellishment module developed in cooperation with KURZ meets the highest demands for embellishment of labels and flexible packaging with metallic or holographic foils and can be added as an option.

This module can be integrated in any mlabel® configuration before or after the UV inkjet print module.

The technology: powerful and futureproof

The mlabel® combines mechanical precision with specifically developed hard- and software to maximize print quality and output. Web and print speeds are perfectly synchronized for all substrates and web widths.

The result: a truly digital hybrid solution.

- Print heads with a smallest dropsize of 3 pl for the printing of high resolution images
- Integrated UV LED pinning units after each print station for immediate precuring of the inks and highest substrate variability
- Web feed integrated in the print module allows for integration in existing printing machines
- Integrated, extremely compact converting module (option) with the possibility of laminating, die cutting, matrix rewind and even variable sheeting on smallest footprint

The control: intelligent software

The clever concept of the central control software incorporates all print and converting modules. The user friendly and intuitive HMI with plain language dialogue promotes the error-free operation of the system.

- Configurable interface to existing workflows
- Variable data processing included with integrated editor using data directly from CSV files or mulitpage PDF
- Quick and easy setup and safe operation

The inks: zero waste

By using best in class UV-LED inkjet inks with the possibility of ink reclaiming, no drop of ink will be wasted.

- UV-LED inks for the use with state of the art, mercury and ozone free UV-LED systems
- Alternate UV-LED low migration inks for the use on sensible materials

Areas of application: everywhere

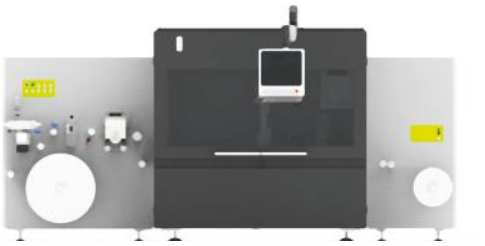
- Industrial and Safety
- Automotive and Electronics
- Food and Beverage
- Health and Personal Care
- Logistics and Consumer Goods

mlabel® – standard configurations

Roll-to-roll printing system, consisting of modules

Basic Configuration 1

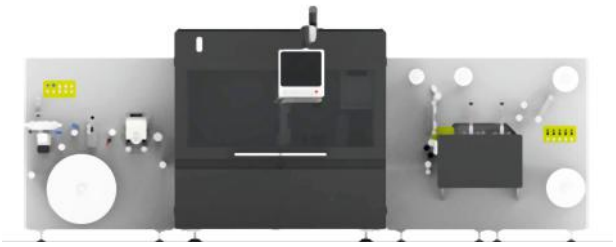
- Material unwind
- Inkjet print module
- Material rewind



Roll-to-roll or roll-to-sheet printing system, consisting of modules

Basic Configuration 2

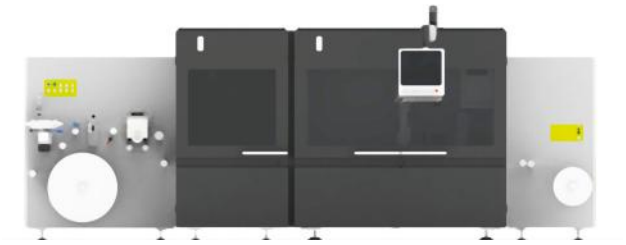
- Material unwind
- Inkjet print module
- Laminating and converting module with material rewind



Roll-to-roll printing system, consisting of modules

Basic Configuration 3

- Material unwind
- KURZ DM-JETLINER module
- Inkjet print module
- Material rewind



Roll-to-roll or roll-to-sheet printing system, consisting of modules

Basic Configuration 4

- Material unwind
- KURZ DM-JETLINER module
- Inkjet print module
- Laminating and converting module with material rewind

mlabel® – technical data

Print technology:	Single pass UV inkjet printing (DoD Piezo technology)
Ink system:	• UV-LED inks, pigmented • UV-LED inks, low migration
Physical resolution:	600 x 600 dpi
Drop sizes:	3, 7, 11, 14 pl
Other possible resolutions:	• 900 x 600 dpi • 1200 x 600 dpi
Max. print speed:	75 m / min
Min. print speed:	3 m / min
Print width:	324 mm
Curing system:	Full UV-LED curing
Pinning:	UV LED (air cooled) after each color
Final curing:	UV LED (water cooled) with cooled substrate plate
Curing after White:	UV LED (water cooled)
Print head cleaning:	automatic, incl. ink reclaiming / print heads can be parked separately
Data workflow / Color management:	ColorGATE Production Server Other software solutions on request
File formats:	PDF, TIFF, BMP, EPS
Data connection / remote access:	Ethernet
HMI:	Touch Monitor
Web width Min. / Max.	50 mm / 350 mm
Material thickness:	30 – 500 µm
Basic configurations:	• C/M/Y/K • C/M/Y/K + W • C/M/Y/K + Varnish • C/M/Y/K + O/G • Others on request

Configuration standard:	• Web tension control • Web guide with splice table • Web cleaner with ionization • Corona pretreatment unit • Web monitoring • Height monitoring (web) • Registration mark sensors
Configuration optional:	Camera system for web inspection
Additional modules	
Converting module:	• Laminating unit with unwind and rewind • Rotary die cutting with rere-gistration control • Variable sheeting • Matrix rewind with dancer control
Embellishment module:	KURZ DM-JETLINER UV-Ink Built-In module
Web transport:	Nip-roller
Material unwind	
Max. roll diameter:	700 mm
Shaft diameter:	3” (76 mm)
Air pressure:	6 bar, dry, oil-free
Ambient temperature:	18 – 28 °C (64 – 82 F)
Electrical supply:	3 x 400 VAC / 50 Hz / 63 A
Dimensions Config. 1 (LxWxH):	4,6 x 2,04 x 2,045 m
Dimensions Config. 2 (LxWxH):	5,6 x 2,04 x 2,045 m
Dimensions Config. 3 (LxWxH):	5,6 x 2,04 x 2,045 m
Dimensions Config. 4 (LxWxH):	6,6 x 2,04 x 2,045 m

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DIGITAL PRINT
SIMPLE.
INTUITIVE.
POWERFUL.

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