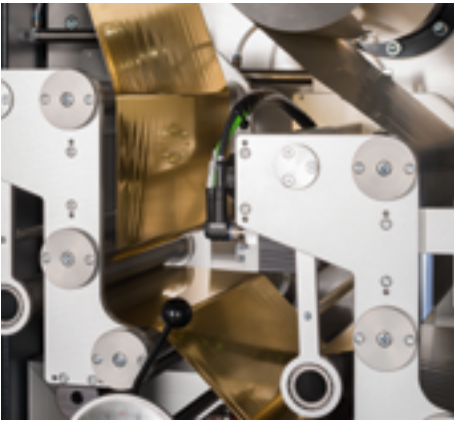# DM-JETLINER

Digital inline metallization on paper and label materials

DM-JETLINER

A glossy look along the entire line

Dancer controlled and featuring a pneumatic clamping device, DM-JETLINER is capable of keeping up with the high speeds of the printing press.

Whether deployed in mass customization, individualization, small runs, special editions or entire product families – our DM-JETLINER inline enhancement module lets you refine your packaging and personalize your jobbing work to fit the customer's specifications. There's no need to compromise on flexibility even as you offer attractive decorative options using metal foils. How does it work? DM-JETLINER can transfer the desired metallization onto paper or a broad range of label materials as part of the digital printing process, while also harnessing the full benefits of our economical digital all-in-one approach. It blends machine, appropriate transfer foil solutions and ink together into efficient and brilliant real metal enhancements. For you, our sophisticated concept, the DM-JETLINER and customized DIGITAL METAL® foil-based solutions open up new perspectives and interesting new fields of business ready to be fascinated by extreme brilliance, world-class resolutions and uncomplicated overprinting along the entire line.

Real metal effects in digital printing

DIGITAL METAL® concept gives you the option of creating digitally printed products and packaging with real metal effects. Customized transfer systems for brilliant, high-gloss finishing give your products that special eye-catching gleam at the Point of Sale.

High gloss motifs with sharp edges

Our easy to process digital transfer products reproduce your motifs at extremely high gloss levels, with world-class resolution and razor-sharp edges. The metallization is transferred onto a digitally printed substrate and can then be overprinted easily using digital or conventional methods.

Design flexibility

Our DIGITAL METAL® concept brings you all the benefits of enhancements for your printed products while preserving your entire range of design flexibility. It represents an attractive alternative to metallized papers or cardboard, as DIGITAL METAL® is compatible with everything from partial metallization to full customization.

Machine columns

· Doors over the entire machine back and front side for easy and fast access
· Machine columns made of steel
· Vibration absorbing leveling elements

Foil unwinding and rewinding

· Dancer controlled for constant foil tension
· Dynamic foil transport
· Able to follow high accelerations of the press
· Pneumatic clamping device for easy and fast foil change

DM-JETLINER

Digital finishing with real metal – quick overview of features:

· **For mass customization and individualization**
· **Customized metallic finishing for individual labels/packaging or various label/packaging campaigns**
· **Attractive embellishment for small runs, special editions or different product series**
· **Variable data brilliantly highlighted**
· **Impressive high gloss effects**
· **Huge variety of colors and metallic shades feasible thanks to overprintability**
· **Almost no limits for creative design**
· **Last but not least: late stage customization**

Printing unit
· Compact print engine module
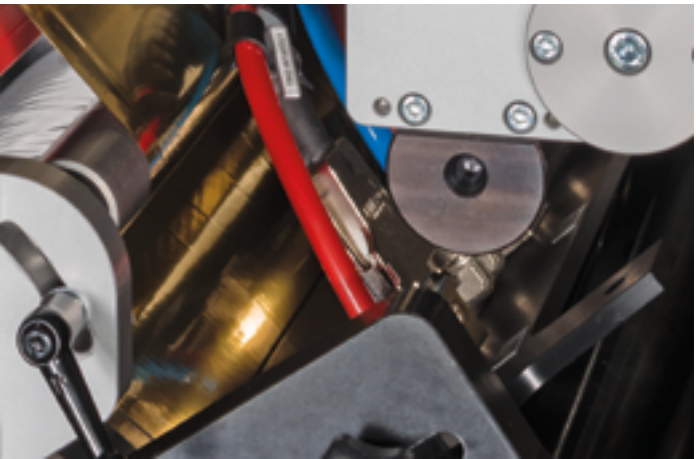· Automatic cleaning unit
· Easily accessible

UV-LED pinning unit
· Controls the spread of the ink droplets
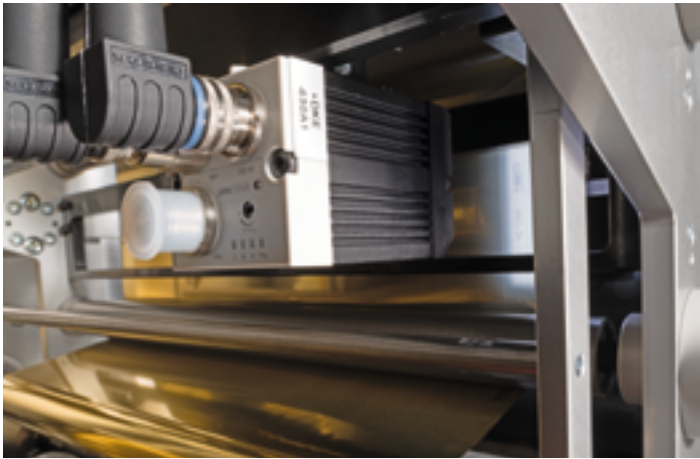· Adjustable over machine interface
· Supports sharp designs

Connection unit (option)
· Mechanical connection between DM-JETLINER unit and digital press with web guidance
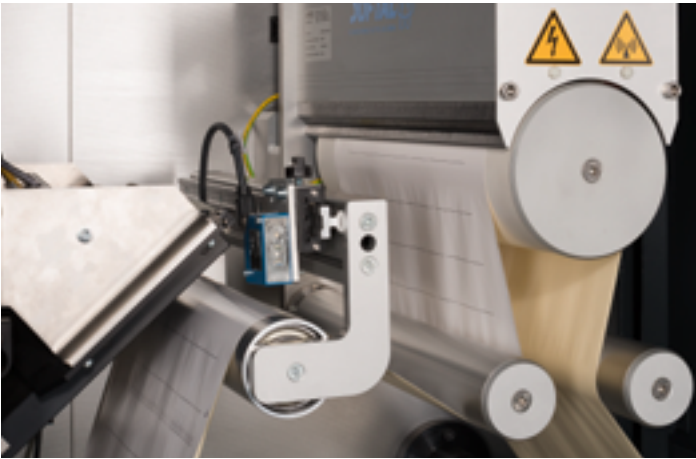· Integrated service door

UV-LED curing station
· Water cooled UV-LED curing station
· Emission width: 342 mm
· Performance: 20 watt/cm²

KURZ Pay-per-Stamp
· Integrated billing system
· Convenient, once-per-month invoicing model
· Automatic consumables reorder upon reaching minimum quantity

Corona pretreatment
· Change of surface tension
· Improve adhesion and wetting
· Automatically stepless power control

Specifications

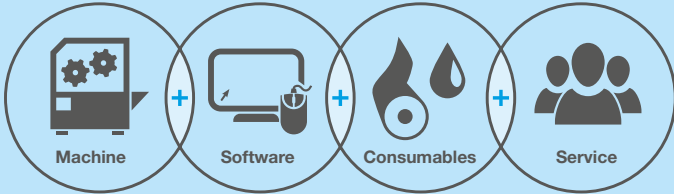|	
Module length/width/height:	approx. 1,790 x 2,040 x 2,345 mm
Application width:	max. 324 mm
Application speed:	max. 75 m/min (max. feasible speed depending on substrate)
Ink type:	UV curable UV-Ink
UV-LED pinning unit:	approx. 3 watt/cm², adjustable over machine control, air-cooled
UV-LED curing station:	20 watt/cm², water cooled UV-curing station
Print head resolution:	600 x 600 dpi
Droplet sizes:	3/7/11/14 pl
Control system:	PC, PLC, touchscreen
Electrical requirements:	3 x 400 V AC, 50 Hz, L1/L2/L3/N/PE, 16 A pre-fuse
Compressed air:	max. 6.5 bar (oil-free) (hose diameter Ø 10 mm)
Register accuracy:	± 0.20 mm (lengthwise and crosswise)
Foil width:	max. 340 mm
Print media width:	150 – 350 mm
Outside foil diameter:	Ø max. 300 mm foil length approx. 2,100 m (RPL)
Supported substrates:	clear and opaque self-adhesive labels, PP, PE and PET, coated paper
File formats:	PDF, TIFF, BMP, EPS
Weight:	approx. 2,600 kg

All technical data are to be interpreted to be only approximate.

DM-JETLINER:

DM-JETLINER lets you transfer metallization effects onto paper and label materials during digital printing. The transfer process can be integrated seamlessly inline into your digital printing machine — upstream from the digital color printing. Once the metallization is applied with a UV-curing adhesive to the unprinted substrate, the PET carrier is removed, and the substrate can be overprinted within the printing machine.

· **Can be integrated into production chain**
· **Also available stand-alone for maximum flexibility**
· **Follows production speed of the digital printing press**
· **Transfer foil, adhesive and enhancement module from one source**
· **Speed to market**
· **Late stage customization**
· **Custom-made hologram designs available (for tickets, etc.)**
· **Metallization is overprintable (imitate/replace offset coldfoil)**
· **Consignment stock of consumables/pay per stamp model**
· **Automatic consumables reordering**

Machine + Software + Consumables + Service

KURZ – your one-stop solution partner

Flexible finishing and inline metallizing? With our complete solution, we achieve this with high efficiency. From the machine to the transfer foil to the ink, we offer you all components from one single source – perfectly matched to each other.

See for yourself – with our printed samples and portfolio of available shades.

The KURZ Group

KURZ

KURZ worldwide

The KURZ Group is an international leader in thin-film technology and supplies products for surface finishing and decoration. With over 5,500 employees at more than 30 sites worldwide, KURZ has an international presence and manufactures under uniform quality and environmental standards in Europe, Asia and the USA. Thanks to KURZ's many years of experience and the constant expansion of our portfolio, we can offer our customers a wide range of products – and all from one source. A global network of subsidiaries, representatives and sales offices ensures short paths and individual, on-site consulting.

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Lexington/New York
KURZ TRANSFER PRODUCTS, L.P. (KTP)
www.kurzusa.com

China
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Shanghai/Shenzhen
KURZ STAMPING TECHNOLOGY
(HEFEI) Co., Ltd.
www.kurz.com.cn

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KURZ do BRASIL
www.kurz.com.br

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www.foilsk.com

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KURZ (Thailand) Ltd.
www.kurz.co.th

Tunisia/Tunis
KURZ North Africa
www.kurz-na.com

Fields of expertise

KURZ is always investing in new technologies. KURZ subsidiaries develop innovative solutions for functional integrations into surfaces as well as products for labeling and counterfeit protection, along with the corresponding software. A comprehensive range of stamping presses and stamping tools rounds off the versatile KURZ product portfolio. Furthermore, KURZ subsidiaries use their expertise to provide future-oriented, custom-made complete solutions including project consultancy and machine and tool technology.

Baier GmbH & Co. KG
www.baier-praegetechnik.de

BURG DESIGN GmbH
www.burg-design.com

Hinderer + Mühlich GmbH & Co. KG
www.hinderer-muehlich.de

ISIMAT GmbH
www.isimat.de

KURZ Digital Solutions GmbH & Co. KG
www.kurzdigital.com

mprint gmbh & co. kg
www.mprint.de

OVD Kinegram AG
www.kinegram.com

PolyIC GmbH & Co. KG
www.polyic.com

SCHÖFER GmbH
www.schoefer.at

Steinemann DPE AG
www.steinemann-dpe.com

Follow us on:

DM-JETLINER Generation 3

Unleash the power of digital embellishment

The success story continues: We have taken the next step to take a winning system to an even higher level. We channelled all our customer experience into the development efforts to generate an incredible user experience. By adding new features like the inline inspection table we bring this solution to a new level of efficiency. Keep your normal process steps but add a lot of value to your products with high quality metallization. DM-JETLINER – the perfect symbiosis of inline metallization with digital overprinting.

New upgrades

High reliability – ready when you are

Mass customization, individualization, small runs, special editions or entire product families: The DM-JETLINER creates high-gloss, brilliant metallic finishing results without compromises. All process parameters are digitally controllable to be used with repeatable high quality. Discover a strong, engineered application unit with full access, that can be easily pulled out for optimum user friendliness.

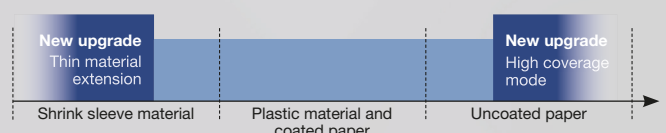## Enhanced design for high user experience

The DM-JETLINER blends machine, appropriate transfer metallization solutions and ink together into efficient and brilliant real metal enhancements. The new plug and play ink container system and foil clamping for easy change over are convincing new features, as are the print mark sensor with white back up roller, to avoid additional set up time with transparent material.

High efficiency

New upgrades for maximum efficiency: Experience a huge variety of colors and metallic shades thanks to overprintability. The inline inspection module for a productive workflow and the integrated buffer system for perfect integration into the HP Indigo web handling system are also convincing benefits, as are the high effectiveness and speed of the finishing process.

Individual creativity, opening up new possibilities

Immerse yourself in the world of digital embellishment and discover impressive design results: Whether extremely thin material or uncoated paper – experience fascinating metallization results and color depth across the board thanks to the high level of coverage. Create brilliant designs that give your products a special shine at the point of sale.

New upgrade
Thin material extension

New upgrade
High coverage mode

Shrink sleeve material | Plastic material and coated paper | Uncoated paper

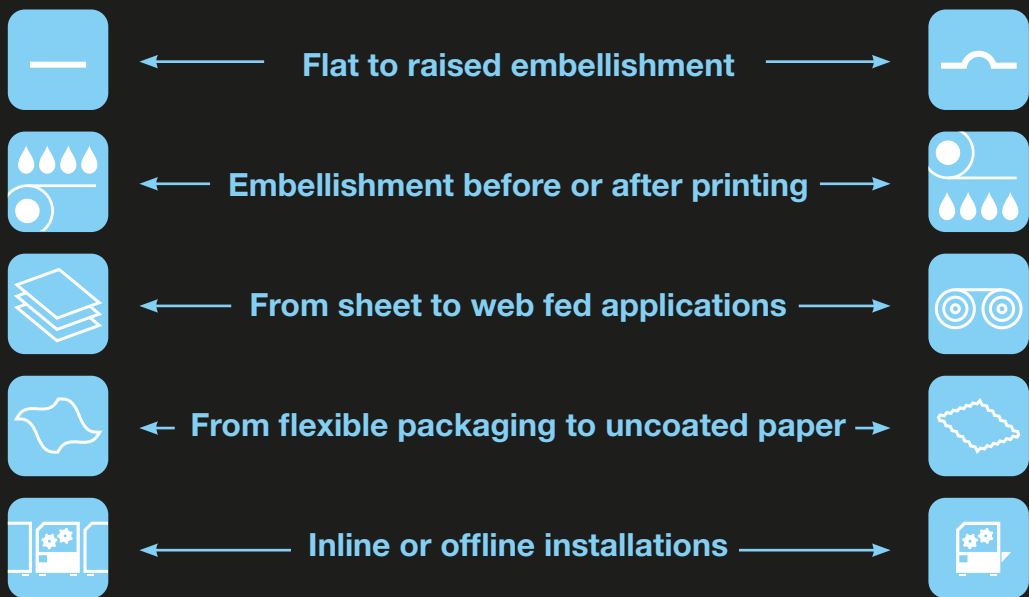# Digital embellishment solutions

KURZ

Digital embellishment at its peak

Standing out from the crowd, differentiating yourself from others, creating individuality – the demands on product designs are constantly increasing. Short-lived trends, competition and individual customer wishes require quick adaptability and high quality standards. Open up new markets and create high-caliber metallic decoration options with our DIGITAL METAL® solutions that expand your range and open up new perspectives.

Flat to raised embellishment

Embellishment before or after printing

From sheet to web fed applications

From flexible packaging to uncoated paper
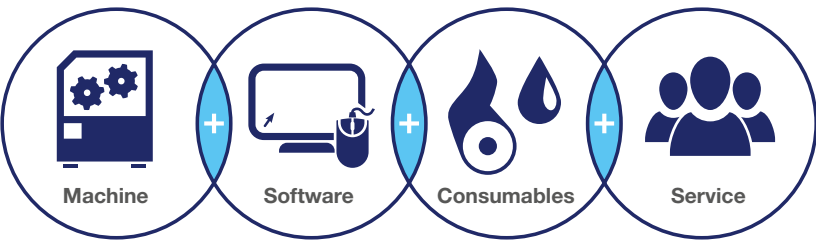
Inline or offline installations

Sustainability for a responsible future

We stand for top quality in the sense of sustainability. The careful use of resources is just as important to us as the core idea of lifecycle thinking. Material and resource efficiency along the production range, optimization of our finishing machines, consistent waste minimization and recycling, reduced energy and ink consumption not only stand for economical, but also for ecological efficiency. We support you in optimizing your ecological footprint.

be a green leader

KURZ

KURZ – your one stop solution partner

Flexible and convenient finishing? With our complete solution, we achieve this with high efficiency. From the machine to the transfer metallization to the ink, we offer you all components from one single source – perfectly matched to each other.

Machine + Software + Consumables + Service

Digital embellishment solutions

KURZ

Digital metallization technologies

Whether classic production or mass customization, short runs or special editions – with our solutions you remain flexible and highly efficient. Experience fascinating metallic effects and high-gloss surfaces, first-class resolution, many colors and deep brilliance. We also offer you a one stop solution: Transfer product, machine, software and service – tailored to your individual needs, convenient, all from one single source.

Transfer on toner / electro-ink	Inkjet on transfer layer	Inkjet on substrate
Design to be metallized already pre printed	Adhesive is applied to transfer layer	Adhesive is applied directly on substrate

Clear handling, intelligent functions and top quality: That's what our transfer on toner solutions stand for. The desired metallization is simply transferred to paper or cardboard using the digital printing process. The metallization is transferred before digital color printing and can be overprinted easily.

✓ **No additional digital print equipment needed**

✓ **Large process window allows easy use with high quality**

The heart of our inkjet on transfer layer technology is the innovative inkjet technology combined with the KURZ DIGITAL METAL® finishing solution. Experience digital metallization and create optimal finishing results with high-gloss, flat metallic effects and deep color brilliance.

✓ **Be ready for many applications from flexible packaging to uncoated papers**

✓ **Easy to use – no matter the substrate – by printing on the transfer layer the printing surface always stays the same**

Experience maximum design freedom and create glossy spot coatings, relief coatings with haptic effects, raised structures and brilliant metallizations in only one single pass. Realize your design ideas for small to medium product series and exclusive special editions.

✓ **Offer new effects with raised metallization**

✓ **Combine various thicknesses to allow more design freedom**

✓ **Add UV spot varnish all in one single pass**

Flat metallization (always overprintable)	Raised metallization (overprintable in defined conditions)

Web fed

DM-UNILINER 2D   DM-JETLINER   DM-UNILINER 3D

Sheet fed

DM-SMARTLINER   DM-MAXLINER 3D

DM-JETLINER®

Case Study

KURZ

Gin label

· Fine graphic artwork, with different locations
· 4c + DIGITAL METAL®

Digital metallization:
DM-JETLINER®
Foil: DIGITAL DIFFRACTION® Crosslight
Substrate: DIG IND VERGE TOP BL

KURZ

Digital print:
HP Indigo 6800

KURZ

Smoothie label
· Personalization with overprint
· 4c + DIGITAL METAL®

GREEN LEAF
HOTELS

A perfect start for you,

SMOOTHIE
mango, orange,
passion fruit

250 ml

Digital metallization:
DM-JETLINER®
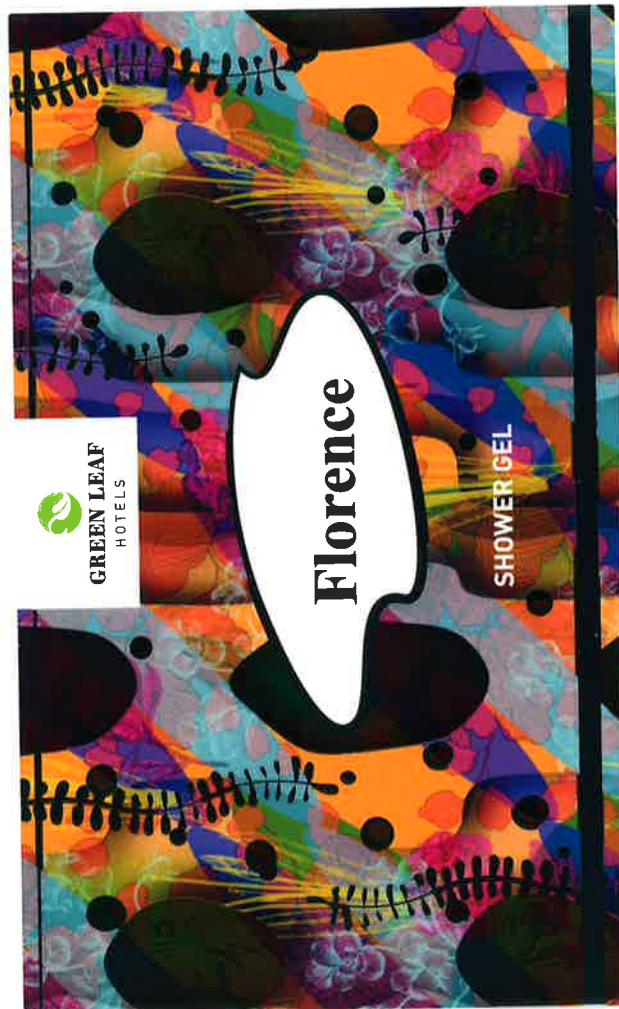Foil: DIGITAL DIFFRACTION® Crosslight
Substrate: MC80, 80g/m²

KURZ

This is an HP Indigo digital print.
Printed on an HP Indigo 6800 Digital Press.
Enhanced with KURZ DM-JETLINER® and
DIGITAL METAL® foil.

DM-JETLINER®

Case Study

KURZ

Shower gel label

· Personalized with overprint of DIGITAL METAL®
· 4c + white + DIGITAL METAL®

GREEN LEAF HOTELS

Florence

SHOWER GEL

Digital metallization:
DM-JETLINER®
Foil: DIGITAL METAL® Silver
Substrate: Dig Indi PP Top Clear

KURZ

This is an HP Indigo digital print.
Printed on an HP Indigo 6800 Digital Press.
Enhanced with KURZ DM-JETLINER® and
DIGITAL METAL® foil.

DM-JETLINER®
Overprinted DIGITAL METAL®

KURZ

This color overview illustrates the large variety of color effects that you can achieve by overprinting DIGITAL METAL®.
The color values in the table serve as a guide only as printing results can vary depending on the inks used.

Overprinted color mixture	Color application 20 %	Color application 40 %	Color application 60 %	Color application 80 %	Color application 100 %
100 % cyan					
100 % cyan 50 % magenta					
100 % cyan 100 % magenta					
50 % cyan 50 % magenta					
100 % magenta					
100 % magenta 50 % yellow					
100 % magenta 100 % yellow					
50 % magenta 100 % yellow					
100 % yellow					
100 % yellow 50 % cyan					
50 % yellow 100 % cyan					
100 % yellow 100 % cyan					
60 % cyan 80 % magenta 100 % yellow					
100 % black					
15 % cyan 20 % magenta 100 % yellow					