ENHANCE YOUR LABEL AND FLEXIBLE PACKAGING PRODUCTS
RETHINK PRINT EMBELLISHMENT

Digital web-fed solution for
inline spot UV coating & hot foiling

Giving Shape to Ideas

YOUR ADVANTAGES WITH THE JETvarnish 3D Web
RETHINK PRODUCTION PRINTING

The JETvarnish 3D Web is the ideal solution for label printers as well as flexible packaging producers, who are looking for a digital way to differentiate their services. The web-solution turns printed jobs into remarkable products that will immediately catch the attention of your customers. The growing label and flexible packaging markets are expecting higher flexibility, shorter run lengths, faster delivery times and personalisation. With the JETvarnish 3D Web it is easy to highlight defined areas or add tactile 3D effects to digital, flexo or offset jobs. In combination with the inline hot foiling module it is the perfect device to achieve high added value and differentiation.
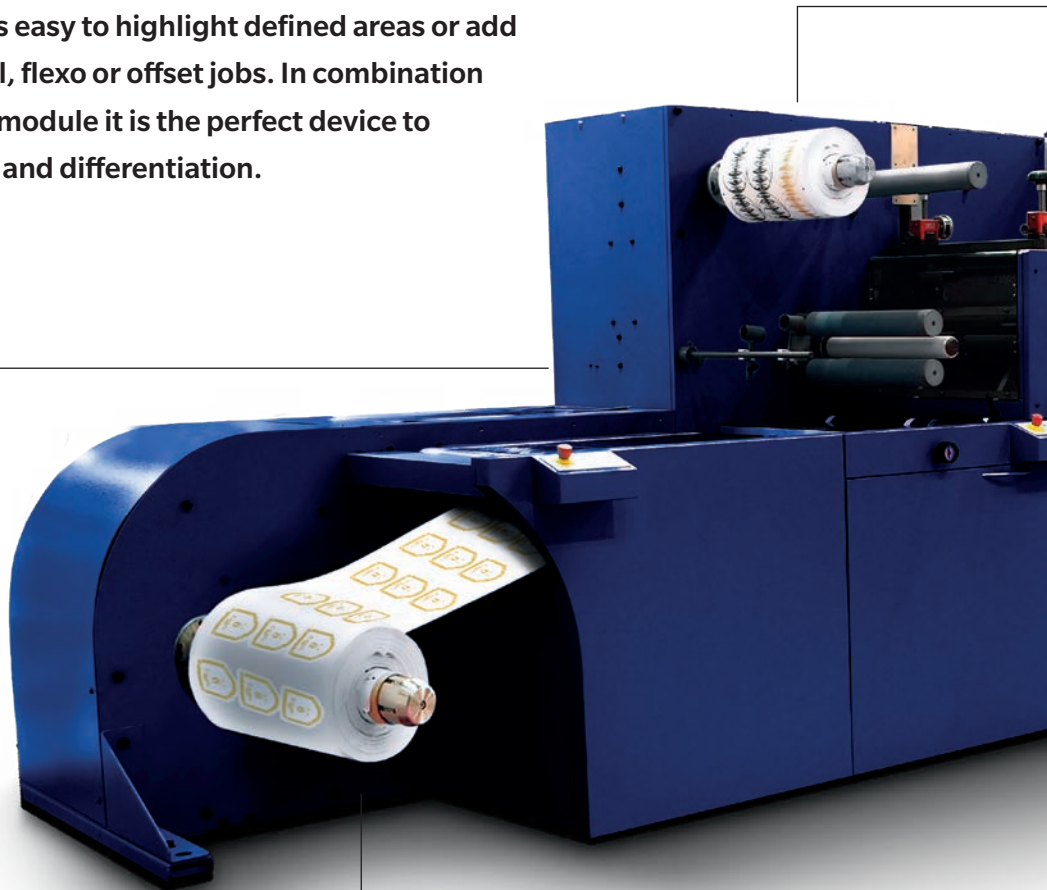
DIE CUTTING UNIT

– Optional semi-rotary die cutting unit to finish labels in-line

– 2 slitter knives as standard (10 max)

– Gap master system as an option

WIDE COMPATIBILITY

– The JETvarnish 3D Web is compatible with digital, flexo and offset web-to-web printing technologies, which are used to produce labels as well as flexible packaging

– Applies spot UV varnish and hot-foil on coated & uncoated materials, synthetics, paper as well as light cardboard (e.g. beverage, cosmetics & healthcare, label, wine, etc.)

EASE OF USE

– While it should be emphasized that the JETvarnish 3D Web is not a push button press, you will quickly understand how the device works, as it is relatively easy to use

– There is less "make-ready" or other special skills required

– For maximum ease of operation

– Frees operators for other jobs

MGI ARTIFICIAL INTELLIGENCE SMARTSCANNER (AIS)

– Varnish and hot-foil registration system

– Automatic skew, stretch contraction and shift adjustment on the fly

– Each sheet is scanned and automatically compared with the digital mask fil

– No registration marks

– Reduced make-ready time and waste

iFOIL TECHNOLOGY

– For digital and variable 2D and 3D varnish and foil embellishments

– Added value for self-adhesive labels as well as flexible packaging

– Metallic, holographic and coloured foil from 100 up to 420 mm width can be used

ROLL UNWINDER & REWINDER

– Web width from 100 mm up to 420 mm

– 3 inch diameter air shaft

– Reels up to 850 mm diameter

– Automatic reel diameter calculation

– Automatic tension adjustment

– Web guide for ±15mm lateral correction

– Splicing table

HIGH PRODUCTION SPEED AND PERFECT VARNISH QUALITY
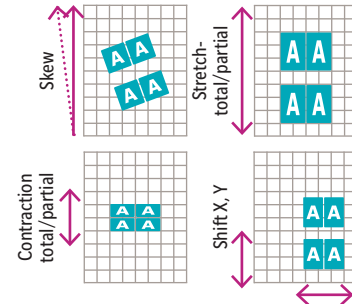
– Speed up to 42 m/min.

– For tactile and embossing effect from 7 to 232 microns (µm)

FULL ROTARY FLEXO UV STATION

– Inline Rotary Flexo UV station

– For full varnishing and priming

– Makes UV varnish and hot foiling finishing possible on a high variety of substrates (including uncoated materials)

TECHNICAL SPECIFICATIONS
RETHINK PRINT EMBELLISHMENT

SYSTEM SPECIFICATIONS

Printing Speeds	Up to 42 m/min.[1] (depending on application).
Supported Web Widths	From 100 mm up to 420 mm
Finishing Width	The maximum image width is 405 mm
Substrate Types[2]	From 50 up to 400 microns (μm)
	Coated, uncoated and textured paper, film or label, self-adhesive labels, white or transparent synthetics, PP, PE, POPP, PET, light cardboard/folding carton, shrink film: PVC, PETG
Wide Compatibility	Compatible with the overall web-to-web printing technologies, narrow web digital presses and the traditional offset or flexo narrow web presses.
Unwinder	Maximum roll diameter capacity: 850 mm; Standard inside core diameter: 3 inches; Maximum roll weight: ±120 kg
UV Flexo Station	An integrated flexo station for full size sleeve coating in rotary. This station is used to apply a UV protection varnish or primer prior to finishing. The module comes with an UV dryer. The station is equipped with an anilox cylinder. Additional anilox cylinders are available as upgrade options.
Spot UV Coating and Embossing Station	This station uses MGI award-winning inkjet technology for producing Spot UV coating. Any defined label area can receive Spot UV coating with or without raised 3D texture effects. A simple grey level TIFF file designed by pre-press controls the surface area and the thickness of the varnish applied over the printed roll. This 100 % digital process eliminates traditional plates, screens and dies.
Varnish thickness	From 7^2 to 232^2 μm of varnish thickness (from 2D flat coats to 3D raised effects).
Inline curing	The unit is equipped with an UV dryer and a cooling drum for optimum web temperature control. The curing sequence also includes a special forward and backward roll motion to dry each label and eliminate waste between runs.
UV Varnish	Gloss varnish 99 GU
Hot Foiling Station	The hot foiling station adds luxurious effects and brand value to label and packaging products. Any defined label area can receive digitally-controlled foil with or without raised effects. A simple grey level TIFF file designed by pre-press controls the surface area and the definition of the foil applied on the printed roll. This 100 % digital process eliminates traditional dies, plates and screens. Foil application can be bypassed when not necessary.
Foil rolls	Foils are delivered on rolls: Foil widths from 100 mm up to 420 mm; Foil roll core diameter: 1'' and 3''; Foil lengths from 400 m up to 2,000 m; Up to 3 rolls can be used simultaneously during the production

Die Cutting Unit	A semi-rotary die cutting unit is available as an option to finish labels in-line on the JETvarnish 3D Web. The unit uses a 21'' magnetic cylinder and an automatic registering system. 2 slitter knives are included as well as a matrix rewinder. Format in semi-rotary: 100 up to 480 mm; Maximum matrix diameter: 600 mm; 2 slitter knives as standard (10 max.); Gap master system for die height adjustment as an option.
Rewinder	Servo-motorized unit; 850 mm maximum roll diameter capacity; Standard inside core diameter: 3 inches; Maximum roll weight: ± 120 kg
Printing Press Compatibility List	Digital: Konica Minolta AccurioLabel, HP Indigo WS4500, HP Indigo, WS6800, Epson, Xeikon, EFI, Durst, etc.
	Offset: All manufacturers and technologies: UV, H_2O or WATERLESS
	Flexo: All manufacturers and technologies: UV or water based
Dimensions & Weight	Up to 11.85 x 1.58 x 1.81 m (L x W x H)[3] 1 meter clearance required on all 4 sides Weight: ± 4,447 kg[3]
Technical Requirements	400 V - 3Ph; 240 V - 1Ph; Dry air compressor (oil-free): 8 bar/102 psi - 24 m^3/h/6 cfm; All speeds are nominal

AVAILABLE OPTIONS

Corona substrate treatment module	In-line system made to optimise varnish adhesion on complex printed substrates
Variable Data Printing	To manage and edit files on the workstation, Full variable data (text, graphic, image) for both 2D/3D Spot Coating and Hot Foiling areas, Integrated barcode (1D/2D) reader system & controller, Raster Image Processor (RIP) as an option

[1] speed will vary according to printing parameter used
[2] confirm substrate compatibility with Konica Minolta
[3] depending on the configuration