ENG

MGI
Digital Technology

JETVARNISH 3D One

Print Embellishment for EveryOne

Digital 2D/3D Spot UV Varnish Solution
Format up to 36.4x75 cm / 14.3x29.5”

INNOVATION IN MOTION

EMBELLISHMENT FOR EVERY ONE

MGI DIGITAL TECHNOLOGY
THE GLOBAL MARKET LEADER AND PIONEER OF DIGITAL EMBELLISHMENT TECHNOLOGIES SINCE 2008.

JETVARNISH 3D TECHNOLOGY
IS 100% DIGITAL AND CAN CREATE A VAST RANGE OF PRINTED FLAT 2D SPOT UV AND TEXTURED 3D VARNISH SPECIAL EFFECTS.

JETVARNISH 3D One provides cost-effective access to **MGI**'s wide range JETvarnish 3D digital embellishment technologies, which feature both sheet and roll-fed solutions for every business model.

The small footprint of the **JETvarnish 3D One** allows printers to have an in-house full-production and prototyping finishing Spot UV varnish resource without any screens, plates or dies to pursue new high-margin applications.

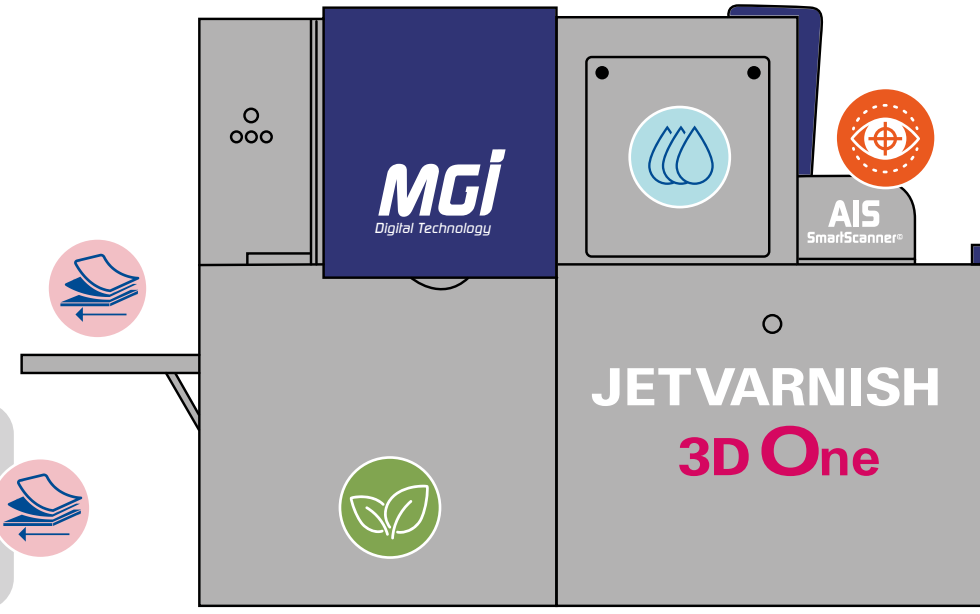
One single varnish formula allows both flat 2D Spot UV and tactile 3D special effects on a wide range of substrate stocks and media such as paper, plastic and carton.

Special **MGI** substrate management processes allow these eye-catching, tactile sensory print treatments to be produced on substrate stocks from 135 to 450gsm – and on a wide range of printed materials, from offset and digital inks to lamination films and aqueous coatings.

The JETVARNISH 3D One provides a simple touch-screen operator software suite and an intelligent & adaptive automatic registration system called the **AIS SmartScanner.** The result is a "Scan & Go" immediate job setup with instantly optimized registration on every piece and with minimal waste.

The JETVARNISH 3D One creates opportunities for enhanced brand identity, more powerful printed communications and highly profitable digital special effects on all printing applications, such as booklets, brochures, business cards, mail-pieces, book & magazine covers, sheet-fed labels, small folding cartons and more!

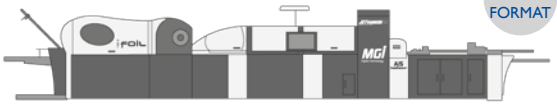
The JETVARNISH 3D One makes it simple and easy for everyone, to enter the flat and tactile Spot UV varnish market with the established market leader and industry standard for digital print enhancement.



PAPER TRAY
- Up to 1,250 sheets at 135 gsm
- Accept all paper formats from A4 / 8x11.8" up to 36.4 x 75 cm / 14.3x29.5"

THE WIDEST DIGITAL EMBELLISHMENT

JETVARNISH 3DS
- sheet to sheet
- up to 36.4 x 102 cm



JETvarnish 3D
- sheet to sheet
- up to 52 x 74 cm

Simple, Easy & Affordable

MGI INKJET PRINT ENGINE FOR SPOT UV COATING & EMBOSSING

- MGI's exclusive inkjet technology with precise piezo (drop-on-demand) applications
- Relief height independently adjustable
- Switch from one job to another with no equipment cleaning required
- Up to 3,500 A4 per hour
- High gloss varnish from 21 to 116 µm in one pass
- Only one varnish for 2D and 3D effects
- No screens, plates or embossing dies

ECO-FRIENDLY

- No cleaning in-between jobs
- No material waste between jobs
- Ozone-free and without heat thanks to LED dryer technology
- Low power comsumption

VARIABLE DATA OPTION

Barcode reader option available for variable data printing (text, graphic and image) on both 2D/3D Spot Coating areas

MGI AIS SMARTSCANNER®: REVOLUTIONARY REGISTRATION TECHNOLOGY

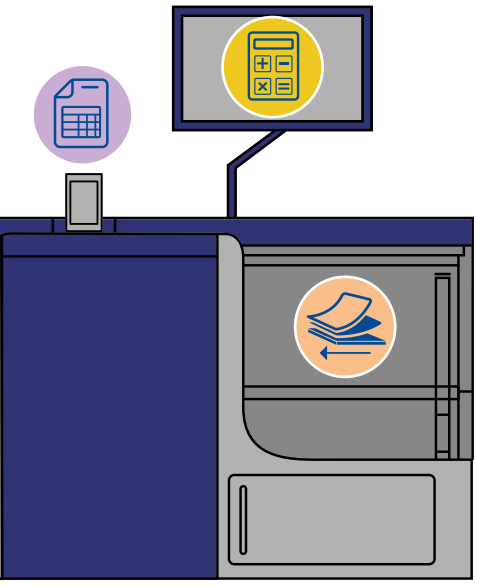
The AIS system eliminates more than 80% of operator setup time spent on registration processes and reduces make-ready waste.

The AIS system uses Artificial Intelligence to create an automatic varnish registration for inkjet heads over the preprinted sheet.

Without operator intervention or a decrease in feeding speed, it makes corrections and adjustments for any defects generated by the original printing run and any lamination process.

Examples:

- *Sheet and image skew*
- *Sheet and image shift on X and/or Y direction*
- *Sheet and image stretch – partial or total*
- *Sheet and image contraction – partial or total*



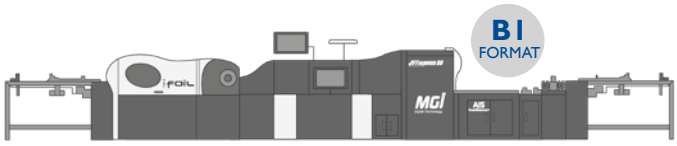
MGI SPOT VARNISH EDITOR & JOB COST CALCULATOR

- Powerful job management tools
- Instant embellishment file modifications
- Elimination of customer pre-press issues
- Estimate production costs before quoting jobs

FEEDER ONE

- Up to 2,200 sheets at 135 gsm
- Paper format from A4 up to 36,4x75 cm (e.g. B2 sheet cut in two)
- Substrate thickness: from 135 up to 450 gsm
- Diverse substrate compatibility
- Automatic double sheet detection

PRODUCT LINEUP IN THE MARKET



JETvarnish 3D Evo

- sheet to sheet
- up to 75 x 120 cm

JETvarnish 3D Web

- roll to roll
- roll width from 100 to 420mm

Technical Specifications

UV Inkjet Technology

- MGI's exclusive inkjet engine technology
- Drop-on-Demand (DoD) inkjet application
- Piezoelectric print heads in single pass printing
- Flexible & scalable architecture

Variable Coating Thicknesses

Depending on your file, the printed material, the CYMK printing technology and/or finishing technology used, the coating thickness can vary from 21[(1)] µm up to 116 µm for 3D raised effects and a tactile finish.
(from 7 to 21 µm with Dithering Mode).

The minimum thickness over toner is 36 µm in order to have optimum printing quality.

Production Speed

Up to 3,500 A4[(2)] per hour at 21 µm[(3)].

Varnish Compatibility [(1)]

- Traditional offset ink
- Toner: Konica Minolta C65xx, C70xx, C10xx, C11xx, C20xx, C30xx, Ricoh, Xerox, HP, Canon...
- Lamination: Soretrac, Derprosa, Ultralen...
- Varnish: acrylic and UV
- With Corona Treatment (option):
  - Toner: Konica Minolta C12000, C14000
  - Inkjet: Konica Minolta KM-1, KM-1e, Screen, Komori...
  - UV offset

Registration

Automated registration
using MGI AIS Smart Scanner system.
Overall registration of ± 200 µm.

Supported Paper Formats

Min: 21x29.7 cm / 8x11.8"
(in portrait mode i.e. long side first)
Max: 36.4x75 cm / 14.3x29.5"

Printable Width Area

35.2 cm / 13.9"

Substrate Thickness

Motorized inkjet head height-adjustment
Min: 135 gsm and not less than 150 µm before printing & lamination
Max: 450 gsm and not more than 450 µm before printing & lamination

Substrate Compatibility

Printing on most[(4)] matte or glossy laminated surfaces, with or without aqueous coating, layered paper, plastic, PVC and other coated materials.
Printing directly on most[(4)] digital prints with no lamination or coating required.

UV Coatings and Yields

10 liters/2.6 US gal. tank capacity.
"On-the-fly" tank changeover possible during production without any interruption and no waste.

Automatic Feeder

- Vacuum Belt Feeding System
- Able to handle a paper pile up to 28 cm / 11.02" high
- Approximately 2,200 sheets at 135 Gsm

Paper Tray

Tray able to handle a paper pile up to 15 cm / 5.9" or approximately 1,250 sheets at 135 Gsm.

Paper Path

- 100% flat paper path.
- Vacuum feed system.
- Air feed system.
- Automatic double sheet detection

In-Line UV Dryer

"On-the-fly" drying & curing via an eco-friendly LED (ozone free).
Spot Coated sheets can be immediately finished or handled; no additional drying time required.

Front End System

- Dedicated PC Unit (22" LCD screen + keyboard/mouse)
- Ethernet connection 10/100/1000 BT (RJ 45)

Built-in application software

- Comprehensive job queue management
- Predictive printing cost calculator (varnish consumption)
- Dedicated image editor to do local and fast image editing prior to production

Options

- Automatic PDF File Converter
- VDP barcode camera
  Optical "on-the-fly" variable data system uses camera and preprinted barcodes.
  Variable data for text, graphic and image on both 2D/3D Spot Coating areas.
- AIS SmartScanner Lighting for metallized substrates
- Corona In-line Module

Remote Technical Support & Maintenance

- Daily maintenance completed in less than 10 min.
- Majority of procedures are automated
- Automatic cleaning system
- From cold start to production in less than 10 min
- Remote troubleshooting & support via included video/web camera (high speed internet connection required)

Dimensions and Weight

4.02 x 1.20 x 1.80 meter
13.19 x 3.94 x 5.91 ft (L x w x h)
Necessary clearance: 1 meter (3.3ft) on all 4 sides
± 1068 kg / 2,354.53 lbs

Electrical Requirements

For Europe and the majority of the world[(5)]
7.5 kW (32 A) at 220-240 Volts 50/60 Hz
2 plugs CEE/IP44 32A
(1P+N+PE)

For USA/CAN only[(5)]
7.5 kW (30A) at 208-240 Volts 50/60 Hz
2 Nema plugs L6-30P
(30A 250V, 2P 3 Wires)

Operating Environment

Temperature : 18 à 30°C / 64 to 86°F.
Relative humidity between 35 and 55%
(no condensation)
Optimum 22°C - 40% humidity

(1) Depending on printing parameter used. Confirm substrate/toner/lamination compatibility with MGI.
(2) A4 landscape
(3) Speed will vary according to printing parameter used.
(4) Confirm substrate/toner compatibility with MGI.
(5) Please refer to the product site survey to learn more about the electrical requirements.

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