

# Technical Specifications

facebook.com/MGIonline f  
@MGI\_HQ  
@MGI\_USA

**MGI**  
Digital Technology

ENG

## 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<sup>(1)</sup> µm up to 116 µm for 3D raised effects and a tactile finish.

The minimum thickness over toner is 30 to 35 µm in order to have optimum printing quality.

## PRODUCTION SPEED

Up to 3,500 A4<sup>(2)</sup> per hour at 21 µm<sup>(3)</sup>.

## REGISTRATION

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

## MANAGED 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 AREAS

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<sup>(4)</sup> matte or glossy laminated surfaces, with or without aqueous coating, layered paper, plastic, PVC and other coated materials. Printing directly on most<sup>(4)</sup> 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 30 cm / 11.8" 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

## OTHER OPTIONS

- **Automatic PDF File Converter (using PC-C1)**
- **VDP barcode camera & Graphic Card**  
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**

## 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 JETVARNISH 3D One

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  
± 1,200 kg / 2,645.56 lbs

## ELECTRICAL REQUIREMENTS

For Europe and the majority of the world<sup>(5)</sup>  
7.5 kW (32 A) at 220-240 Volts 50/60 Hz  
2 plugs CEE/IP44 32A (IP+N+PE)

For USA/CAN only<sup>(5)</sup>  
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 to 30°C / 64 to 86°F.  
Relative humidity between 30 and 50% (no condensation).

(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.

# JETVARNISH 3D One

*Print Embellishment for EveryOne*  
*Digital 2D/3D Spot UV Varnish Solution*  
*Format up to 36.4 x 75 cm / 14.3x29.5"*



C.C. 15935 - JETVARNISH 3D One UK - 14/10/2019

This is not a contractual document and technical specifications subject to change without notice.  
All the other trademarks cited are marks registered by their respective manufacturers.  
Operator / end-users are invited to submit substrates to MGI for validation.

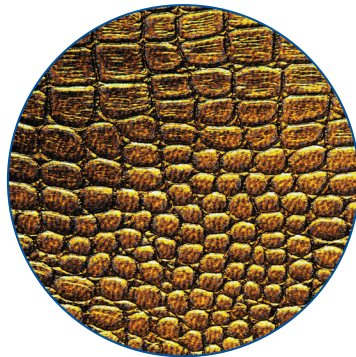
Europe/Middle-East/Africa/Russia  
4, rue de la Méridienne  
94260 Fresnes - FRANCE  
Tel : +33 (0)1 45 21 06 60  
Fax : +33 (0)1 46 68 71 55  
info@mgi-fr.com  
www.mgi-fr.com

**MGI**  
Digital Technology

Americas/Caribbean/Asia Pacific  
3143 Skyway Circle  
Melbourne, FL 32934 - USA  
Tel: +1 321 751 6755  
Fax: +1 321 751 6777  
info@mgi-usa.com  
www.mgi-usa.com

**INNOVATION IN MOTION**

**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.



#### 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"

**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.

#### MGI INKJET PRINT ENGINE FOR SPOT UV COATING & EMBOSING

- 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 116µm 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 consumption



#### VARIABLE DATA OPTION

Barcode reader & graphic card 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 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

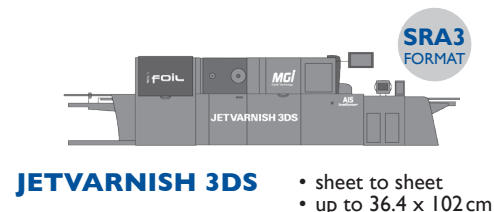


#### FEEDER ONE

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

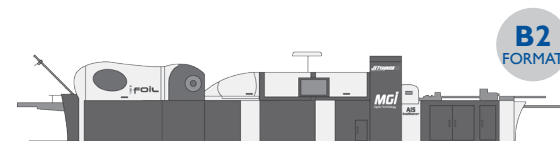


## THE WIDEST DIGITAL EMBELLISHMENT PRODUCT LINEUP IN THE MARKET



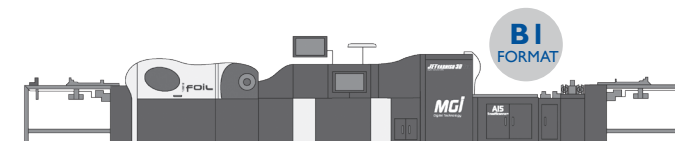
**JETVARNISH 3DS**

- sheet to sheet
- up to 36.4 x 102 cm



**JETvarnish 3D**

- sheet to sheet
- up to 52 x 74 cm



**JETvarnish 3D Evo**

- sheet to sheet
- up to 75 x 120 cm



**JETvarnish 3D Web**

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