



**MGi**  
Digital Graphic Technology

# **JET VARNISH 3D**

*Inkjet Spot UV Coater  
With NEW 3D Raised Effects  
52x105cm - 20x42"*



*Innovation in Motion*



Packaging

Cosmetic

Overwrapping

Shopping Bags

Book Covers

Luxury Packs

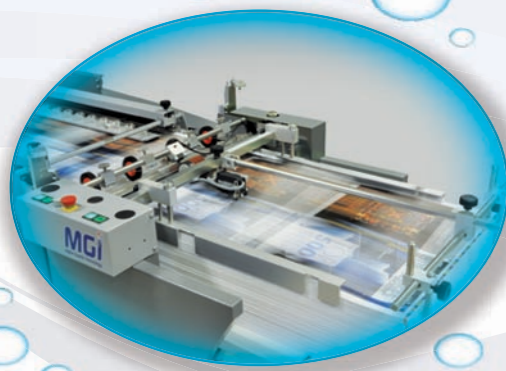
Labels

Gift Boxes



The JETvarnish 3D takes digital spot UV coating to a new dimension, featuring increased throughput for flat spot UV jobs and amazing 3D raised effects. Ideal for operations with digital and offset presses up to 52x105 cm (20x42") format, the JETvarnish 3D is the perfect solution for 3D or traditional spot UV coating on runs from one to thousands, providing printers with true value-added services.

Gain new customers and explore profitable market opportunities: your clients will receive visually stunning, tactile pieces that allow them to differentiate from their peers and with personalization not available via traditional analog spot UV coating methods.



## Instant Production

The JETvarnish 3D allows for fast startup without plates, screens or waste, producing anything from one to several thousand sheets per hour with ease. On the same document and in a single pass, the JETvarnish 3D can change the coating thickness from **8 to 100 Microns**, depending on the user's defined areas.



## MGI's Digital Advantage

With extended formats ranging up to **52x105cm (20x42")** and weights up to **600 GSM**, you can use the JETvarnish 3D to upsell each one of your regular printed jobs into high margin spot UV jobs. The 100% digital JETvarnish 3D allows you to take one sheet from a job and spot UV coat it, producing a sellable proof so your customers can see the potential and additional visibility and impact that their jobs could have.

# Take Your Prints To A Whole New Dimension

## Spot UV Coat Directly Onto Digital Prints

No lamination required. Take advantage of MGI's newly redesigned coating formula coupled with the ability to precisely vary the level of coating thickness on each sheet along with MGI's ARC registration technology to give your digital prints an additional WOW factor. The Variable Data option adds full personalization capabilities for maximum marketing impact.

## Inkjet Technology

MGI's exclusive inkjet technology bring you the quality you deserve, from the first page to the very last. Precise piezo (drop-on-demand) print heads allows for lines as small as **0.5 mm (1/144")** or as wide as the sheet (**max. width 515 mm/20"**). With MGI's patented coating formula, users can switch from one job to another with no equipment cleaning required.



## UV Curing

The JETvarnish's integrated UV curing dries sheets "on-the-fly" via a conveyor belt, with no solvents required. Sheets are completely dry upon entering the high capacity stacker and can be immediately handled.

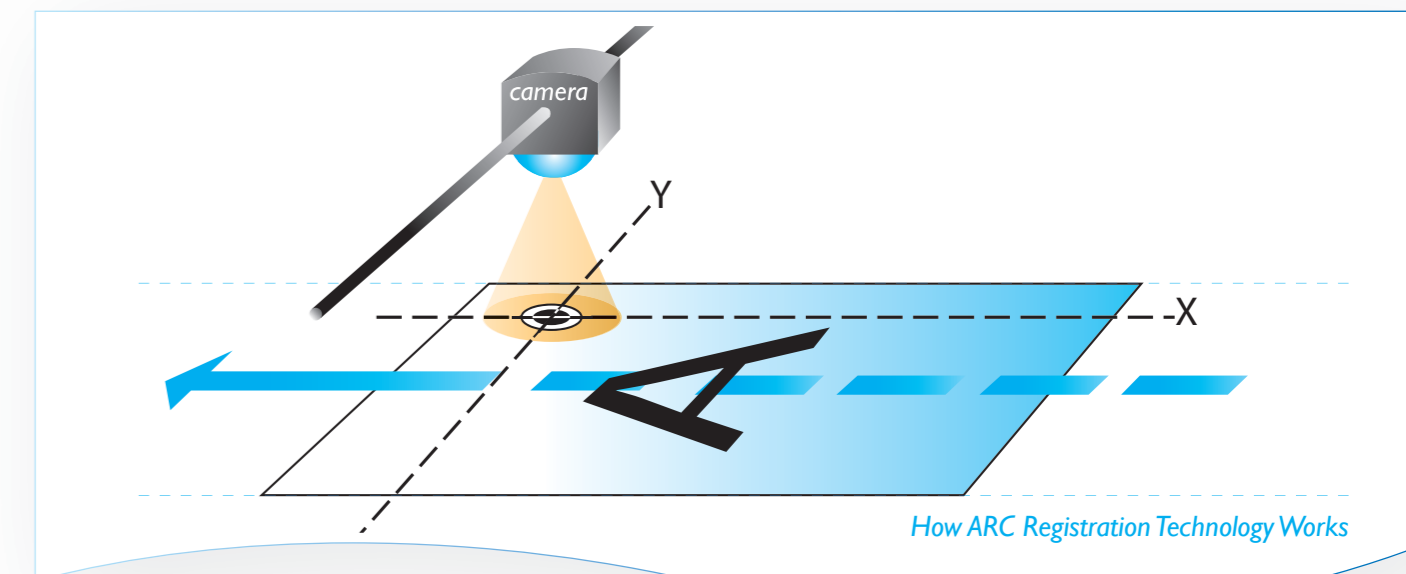


## Respecting Mother Nature

- Closed-circuit functioning maximizes varnish consumption, thus preventing waste
- Lower noise levels than European standards, virtually eliminating any noise pollution
- Lower energy consumption than traditional UV systems.

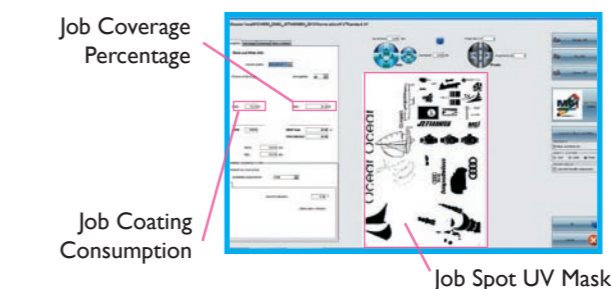
## ARC Registration Technology

The JETvarnish 3D comes equipped with ARC registration technology (Automated Camera Registration), an onboard camera combined with a proprietary tracking system designed to calibrate (on-the-fly) coating registration from sheet to sheet. The camera is capable of reading any printed marks and automatically corrects for changes in X and Y portions of each sheet. The ARC system ensures accurate spot UV coating, even on jobs with inconsistent print registration, a traditional obstacle for those wishing to spot UV coat jobs printed on some digital presses.



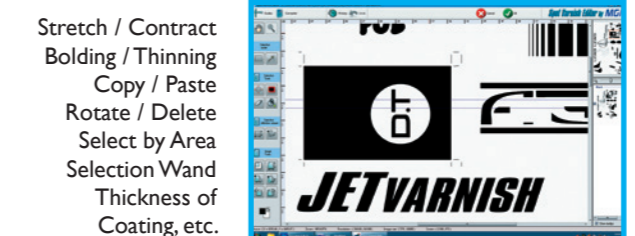
## Production Assistance

The JETvarnish 3D comes with a suite of software tools designed to streamline your production. It includes three main modules: WorkStation Manager, Spot Varnish Editor & Job Cost Calculator



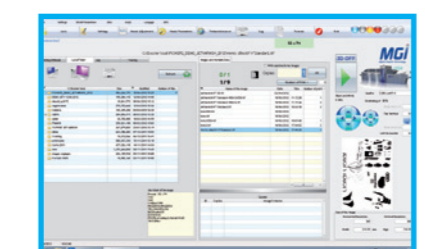
### Job Cost Calculator

Based on your job's spot UV coating mask, this powerful calculator anticipates your coating consumption down to the microliter; something that has until now never been possible on traditional spot coating technologies. Sleep soundly at night knowing in advance what your precise production costs are, in turn allowing you to make reliable and accurate job estimates.



### Spot Varnish Editor

An easy to use tool designed for editing job masks on-the-fly. Why waste time going back and forth between your production and prepress departments when the JETvarnish operator can simply do all job file modifications right there from the production floor? A major time saver designed for a high production work environment.



### WorkStation Manager

The WorkStation Manager allows you to follow your jobs, manage your job queue, create job tickets, recall reprints, adjust your ARC camera system, manage your printhead parameters and much more. A brand new feature now allows you to easily export all your detailed production data for internal costs for analysis or for quick integration into your MIS system..





# Technical Specifications

## Printing Technology

MGI's exclusive inkjet engine technology  
Drop-on-Demand (DoD) technology  
Piezo heads mounted on a solid plate covering the entire sheet width  
Single pass printing  
Flexible & scalable printing architecture

## Coating Thicknesses

Depending on your file and the paper used, the coating thickness can vary, from 8 microns ( $\mu$ ) same as a traditional flat spot UV coating, Up to 100 $\mu$  for 3D raised effects and a tactile finish

## Production Speed

Up to 3,000\* B2 sheet size per hour (flat spot UV coating)

## Registration

Left & right side lay guides on either side of the sheet.  
New feature of automated registration using MGI's ARC system with optical detection of crop marks  
Overall registration of +/- 200 microns

## Formats

- **Min :**  
21x30 cm / 8 x 11.8"
- **Max :**  
52x105 cm / 20x42"

## Print Width

51.5x73.5 cm (standard)  
51.5x104.5 cm (extended)

## Substrate Thickness

From 135 to 600 gsm  
Motorized height-adjustment print heads

## Substrates

Printing on matte or glossy laminated surfaces, with or without aqueous coating, layered paper, plastic, PVC and other coated materials.  
NEW - spot 3D coat directly onto digital prints (ie. MGI Meteor) with no lamination or coating required.

## Coating and Special UV inks

New UV coating specially formulated to be used with or without 3D raised effects

## Capacity

Coating is supplied in a recyclable 6 liter/1.59 gallon bag  
"On-the-fly" bag replacement during printing  
Capacity of ink circuit during operation - approximately 1 liter / 0.26 gallon

## High Capacity Automatic Feeder

High capacity feeder able to handle a paper pile up to 60cm / 23.6" high  
Approximately 4,000 sheets at 135 gsm

## High Pile Output Stacker

High capacity stacker able to accommodate stacks up to 60cm / 23.6" high  
Approximately 4,000 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 integrated UV lamps  
Spot Coated sheets can be immediately finished or handled, no additional drying time required

## Front End System

Dedicated PC (CPU + screen + keyboard/mouse)  
Ethernet connection 10/100/1000 BT (RJ 45)

## Built-in Application Software

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

## Variable Data

Optional variable data management  
Requires an additional RIP to handle PDF file with multiple pages including VDP data

## Dry Air

An onsite dry air system is necessary for the new sheet stacker blower

## Maintenance & Remote Technical Support

Daily maintenance completed in less than 10 minutes  
Majority of procedures are automated  
From cold start to production in less than 15 minutes  
Remote troubleshooting & support via included video/web camera (high speed internet connection required)

## Operator Panel

Integrated user-friendly LCD touch-screen

## Options

- RIP for Variable Data Printing (PDF files)
- 2<sup>nd</sup> row of print heads (more color or more speed or more thickness)

## Dimensions (L x W x H) & Weight

7.67 x 2.24 x 2.16 meter (with all doors opened)  
1 meter / 3.3' clearance required on all 4 sides  
 $\pm$  2,150 kg /  $\pm$  4,470 lbs

## Electrical Requirements

30 kW (32 A) at 400 Volts - 1 plug CEE/IP44 63A (3P+N+T)  
3.7 kW (16 A) at 220 Volts - 1 plug CEE/7 16A (2P + T)  
2 kW (16 A) at 220 Volts - 2 plugs CEE/7 16A (2P + T)

## Operating Environment

Temperature: 18 to 30°C / 64 to 86°F  
Relative humidity: between 30 and 50% (no condensation)

## Respecting the Environment

Eliminates resource waste (wasted electricity, paper and varnish)  
No plates (offset) or screens (screen printing)  
No messy cleanup or preparation between jobs  
Drastic reduction in amount of consumables and use of bulk packaging. Coating without solvent

the default sheet format is 52x74cm/20"x29", unless otherwise stated

\*speed will vary according to printing parameter used



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