



# Digicon Series 3

## Specification

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# Digicon Series 3

## Specification

### General

Handling	Left to right or right to left	
Maximum material thickness	0.45mm	0.018"
Minimum material thickness	0.05mm	0.002"
Maximum running speed die cutting	80m/min	210ft/min
Maximum running speed of FAST Track semi rotary	150m/min	492ft/min
Maximum running speed full rotary re register	150m/min	492ft/min
Minimum running speed	2m/min	6.6ft/min
Manual cross adjust movement	+/- 10.00mm	0.394"
Maximum material width	350mm	13.780"
Minimum material width	150mm	9.055"

### Unwind

Standard unwind diameter	800.00	31.496"
Maximum unwind diameter	1000.00mm	39.370"
Standard unwind shaft diameter	76.20mm	3.000"
Maximum adjustment web guide	+/- 25.40mm	1.000"

### Corona Treater

Corona power	1 - 3 KW
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### 25 Tonne flatbed hot foil & emboss

Standard foil tool thickness	6.35mm / 7.00mm	0.250"
Maximum diameter foil unwind	450.00mm	17.717"
Standard foil unwind shaft diameter	76.20mm	3.000"
Maximum adjustment web guide	305.00mm x 340.00mm	12.008" x 13.386"
Minimum foil pull	1.00mm	0.039"
Skew adjust of head	+/- 1°	
Maximum running speed with 304.80mm (12.000") repeat	52m/min	171ft/min
Maximum running speed with 622.30mm (24.500") repeat	72m/min	236.2ft/min
Maximum number of foils in web direction	3 Lanes	
Chase turn device	Yes	
Operational modes	Stroke & Rotary	
Maximum foil chase temperature	180°C	356°F
Blanket thickness	0.95mm	0.037"
Embossing tools	6.35mm female 1.15mm male	0.250" female 0.045" male
Intelligent foil save system	Yes	



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### BIG FOOT 50 Tonne flat bed hot foil & emboss

Standard foil tool thickness	6.35mm / 7.00mm	0.250"
Maximum diameter foil unwind	450.00mm	17.717"
Standard foil unwind shaft diameter	76.20mm	3.000"
Maximum hot foil stamp area (LxW)	410.00mm x 340.00mm	16.142" x 13.386"
Minimum foil pull	1.00 mm	0.039"
Skew adjust of head	+/- 1°	
Maximum running speed with 410.00mm (16.142") repeat	60m/min	197ft/min
Maximum running speed with 622.3mm (24.500") repeat	72m/min	236.2ft/min
Maximum number of foils in web direction	4 Lanes	
Maximum number of foils across web	4 Lanes	
Chase turn device	Yes	
Operational modes	Stroke & Rotary	
Maximum foil chase temperature	180°C	356°F
Blanket thickness	0.95mm	0.037"
Embossing tools:	6.35mm Female 1.15mm Male	0.250" Female 0.045" Male
Intelligent foil save system	Yes	

### Semi rotary hot foil & emboss

Unwind shaft diameter	76.20mm	3.000"
Maximum hot foil stamp width	320.00mm	12.598"
Minimum foil pull	1.00mm	0.039"
Maximum number of foils in web direction	40m/min	131ft/min
<b>Magnetic Cylinder</b>		
Standard tool thickness	0.71mm	0.028"
Maximum hot foil stamp repeat 482.00mm (25.500")	622.30mm	24.500"
Maximum hot foil stamp repeat 635.00mm (25.500")	457.20mm	18.000"
<b>Clamping Cylinder</b>		
Standard tool Thickness	1.000mm	0.039"
Maximum hot foil stamp repeat 482.00mm (19.000")	546.10mm	21.500"
Maximum hot foil stamp repeat 635.00mm (25.500")	381.00mm	15.000"



# Digicon Series 3

## Specification

### Flexographic printing station

Flexographic type	full rotary / full rotary re-reg / semi rotary	
Weight of ink cartridge (empty)	10kg	22lb
Maximum printing width	330.00mm	12.992"
Maximum rotary flexo plate cylinder size	647.70mm	25.500"
Minimum rotary flexo plate cylinder size	254.00mm	10.000"
Maximum repeat semi rotary with 647.70mm (25.5") cylinder	622.30mm	24.500"
Minimum plate repeat semi rotary	50.80mm	2.000"
Coating roller width - standard	325.00mm	12.795"
Accuracy to pre printed web	+/- 0.15mm	0.006"
Doctor blade carbon steel	15.00mm x 0.15mm	0.591" x 0.006"
Doctor blade M10 tipped trupoint orange synthetic	15.00mm x 0.7mm	0.591" x 0.028"
Ink pump duct connection inlet diameter	10.00mm	0.394"
Ink pump duct connection outlet diameter	25.00mm	0.984"

### Cold Foil

Cold foil semi rotary without chill roller maximum speed	27m/min	89ft/min
Cold foil semi rotary with chill roller maximum speed	40m/min	131ft/min
Cold foil full rotary with chill roller maximum speed	100m/min	328ft/min

### UV curing system

Type - low energy air cooled	GEW E2C	
Lamp arc length	380.00mm	14.961"
Lamp power	140-180w/cm	355.6w/inch

### Hot air dryer

Maximum temperature	100°C	212°F
Air flow	300m <sup>3</sup> /h	10594.4ft <sup>3</sup> /h

### Overlamination

Maximum unwind roll diameter	450.00mm	17.717"
Standard unwind/rewind shaft diameter	76.20mm	3.000"
Maximum rewind roll diameter	450.00mm	17.717"



# Digicon Series 3

## Specification

### High speed flatbed screen printing

Repeat length	85.00mm-410.00mm	3.345"-16.142"
Minimum image (web direction)	10.00mm	0.300"
Maximum mechanical speed (repeat dependent)	48m/min	157ft/min
Screen skew adjustment	+/- 2°	
Screen deflection	0.00-8.00mm	0.000-0.310"
UV curing GEW E2C	180w/cm	457w/inch

### Die cutting station

Type	Semi rotary / Rotary	
Maximum die cut repeat on 647.7mm (25.500") cylinder semi rotary	622.30mm	24.500"
Minimum die cut repeat semi rotary	50.80mm	2.000"
Maximum die tool size rotary (option)	647.70mm	25.500"
Minimum die tool size rotary	304.80mm	12.000"
Maximum die cutting width	345.00mm	13.583"
Standard flexible die tool thickness	0.44mm to suit 0.48mm air gap	0.017" to suit 0.019" air gap
Accuracy to printed web	+/- 0.15mm	+/- 0.006"

### FAST Track high speed die cutting

**Granted patents:** GB2539385; AU2016269766

**Patent applications:** EP16725193.3; CA2,981,241; CN201680032146.1; US15/575,291; MX/a/2017/014510; BR 11 20170 22336 8; IN201717046345; JP2017-563237

Type	Semi rotary/Rotary	
Maximum die cutting width	345.00mm	
Standard flexible die tool thickness	0.44mm to suit 0.48mm air gap	0.017" to suit 0.019" air gap
Accuracy to printed web	+/- 0.15mm	+/- 0.006"

#### Dual anvil mode

Maximum die cut repeat	558.00mm	21.969"
Minimum die cut repeat	100.00mm	3.937"

#### Single anvil mode

Maximum die cut repeat	785.00mm	30.906"
Minimum die cut repeat	100.00mm	3.937"



# Digicon Series 3

## Specification

Waste matrix rewind		
Type	Standard / Contact	
Maximum rewind diameter	800.00mm	31.496"
Rail mounted contact waste matrix maximum diameter	450.00mm	17.717"

Rewind		
Maximum roll diameter upper shaft	600.00mm	23.622"
Maximum roll diameter lower shaft	800.00mm	31.496"
Standard rewind air mandrel size	76.20mm	3.000"

Slitting		
<b>Scissor slit</b> minimum slit width	15.00mm	0.591"
<b>Scissor slit</b> maximum number of knives	20	
<b>Autoslit</b> minimum slit width in edge trim mode	31.00mm	1.220"
<b>Autoslit</b> positional accuracy of slitting knives	+/- 0.10mm	0.004"
<b>Autoslit standard</b>		
Minimum slit width - excluding edge trim mode	24.00mm	0.945"
Maximum number of knives	12	
<b>Autoslit option</b>		
Minimum slit width - excluding edge trim mode	15.00mm	0.591"
Maximum number of knives	15	
<b>Crush slit</b> minimum slit width	14.00mm	0.551"
<b>Crush slit</b> maximum number of knives	16	
<b>Razor blade</b> minimum slit width	12.00mm	0.472"
<b>Razor blade</b> maximum number of blades	20	
<b>FAST slit</b> minimum slit width	27.00mm	1.063"
<b>FAST slit</b> maximum number of knives	10	

SGTR AutoSet turret rewinder		
Maximum roll diameter	400.00mm	15.478"
Maximum web width	350.00mm	13.780"
Standard rewind air mandrel size	76.20mm	3.000"
Maximum mandrel diameter	76.20mm	3.000"
Minimum mandrel diameter	25.40mm	1.000"
Rewind sleeve on 76.20mm (3.000") mandrel	101.60mm	4.000"
Maximum running speed	150m/min	492ft/min
Counting	Labels and Metres	
Interlabel cutting accuracy with a 3.00mm (0.118") interlabel gap	100m/min	328ft/min



# Digicon Series 3

## Specification

### Metal to metal through die cutter/sheeter

Sheeter tool repeat with 6 blades	304.80mm	12.000"
Sheet length increments	0.10mm	0.004"
Minimum sheet length	50.80mm	2.000"
Maximum running speed with 2 blades on a 304.80mm (12.000") sheet	120m/min	394ft/min
Maximum running speed with 3 blades on a 250.00mm (9.843") sheet	101m/min	331.4ft/min
Maximum running speed with 6 blades on a 125.00mm (4.921") sheet	62m/min	203ft/min
Print or label to sheet accuracy	+/- 0.15mm	0.006"
Die cutting mode with standard tool maximum running speed	150m/min	492.1ft/min

### Power requirements

Basic machine including GEW only (50hz)	380/415V 3PH, E & N 32AMP/PHS
Basic machine including GEW only (60hz)	208/220V 3PH & E 40AMP/PHS
Air requirements	6 BAR

### Dedicated sheeter

Fixed sheeter tool repeat	304.80mm	12.000"
Sheet length increments	0.10mm	0.004"
Minimum sheet length	50.80mm	2.000"
Maximum running speed with 2 blades on a 304.80mm (12.000") sheet	120m/min	394ft/min
Maximum running speed with 3 blades on a 250.00mm (9.843") sheet	101m/min	331.4ft/min
Maximum running speed with 6 blades on a 125.00mm (4.921") sheet	62m/min	203ft/min
Print or label to sheet accuracy	+/- 0.15mm	0.006"



# Digicon Series 3

## Specification

Module dimensions - length (L) x width (W) x height (H)		
Inline interface	0.90m x 1.52m x 1.80m	2'11" x 4'12" x 5'11"
Unwind (800mm)	1.30m x 1.52m x 1.80m	4'3" x 4'12" x 5'11"
Unwind (1000mm)	1.40m x 1.59m x 1.90m	4'7" x 5'2" x 6'2"
25 Tonne flatbed hot foil and emboss	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"
BIG FOOT 50 Tonne flatbed hot foil and emboss	1.80m x 1.52m x 2.00m	5'11" x 4'12" x 6'6"
Flexographic print including UV	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"
Overlaminaton (self wound/with carrier)	Does not increase machine dimension	
High speed flatbed screen print	1.65m x 1.52m x 1.80m	5'5" x 4'12" x 5'11"
Die cutting module	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"
FAST Track high speed die cutting	1.50m x 1.52m x 1.80m	4'11" x 4'12" x 5'11"
Laser die cutting	2.40m x 1.52m x 1.80m	7'10" x 4'12" x 5'11"
Mid press waste matrix rewind	0.60m x 1.52m x 1.80m	1'12" x 4'12" x 5'11"
Rewind	1.50m x 1.52m x 1.80m	4'11" x 4'12" x 5'11"
2 Spindle semi-auto turret including buffer & matrix stripping	3.00m x 1.52m x 1.80m	9'10" x 4'12" x 5'11"
SGTR AutoSet turret rewinder	1.73m x 1.65m x 2.00m	5'8" x 5'5" x 6'6"
Double crossover peel and reveal 3 ply	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"
Sheeter (including conveyer)	1.80m x 1.52m x 2.00m	5'11" x 4'12" x 6'6"
Sheeter/through die cutter (excluding conveyer)	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"
Conveyor - standard	1.10m x 1.52m x 1.80m	3'7" x 4'12" x 5'11"





# Digital Finishing by ABG



Flawless finishing with automated efficiency

Contact us: +44 1262 671 138 | [info@abgint.com](mailto:info@abgint.com)

[abgint.com](http://abgint.com)

The Digicon Series 3 is the result of continuous developments in digital finishing made by ABG engineering teams.

Want to find out more?

Head to our website to learn more about our digital finishing solutions and automated workflow connectivity.



## Time saving

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Full automation for quick job changeover and simple pre-press set-up

## Reliable results

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High quality components, intelligently designed for consistent production



## Simple to configure

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Modules and options to configure the machine exactly as you need

## Flexible

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Works across a range of print applications; roll to roll or sheet.



Digital Finishing

## Accurate finishing

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Cutting edge finishing technology to create high quality label embellishments

## Intelligent

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Integrates with any Management Information System (MIS)

Contact us: +44 1262 671 138



Flawless finishing with automated efficiency

## Market leading technology

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Enjoy the reliability of tried and trusted Digicon technology

## Multiple Web Widths

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Available at two different web widths; 330mm & 430mm

[abgint.com](http://abgint.com)

# Digicon Series 3

Add value to your  
**digital printing**

Over **1500** digital machines  
installed **worldwide**

The Digicon Series 3 is our flagship machine with thousands of installations worldwide.

Modular in design, the DS3 can be tailored to meet your business needs, enabling you to create a clear and competitive advantage.

Designed for any digital printing application, the Digicon Series 3 can be used roll-to-roll or roll-to-sheet.



#### Accurate

Built with precision to ensure consistent results.

#### Flexible

With modules and options to give you a competitive edge.

#### Choice of web widths

330mm & NEW 430mm.

#### Easy-to-Use

With intuitive controls and low-cost maintenance.

#### Fast

Able to keep pace, inline, with the latest digital print engines.

#### fleyeVision

Intergrate our 100% inspection solution to detect any errors for full quality control.

#### Non-Stop capabilities

When paired with our Non-Stop Winding solutions or Vectra turret rewinders.

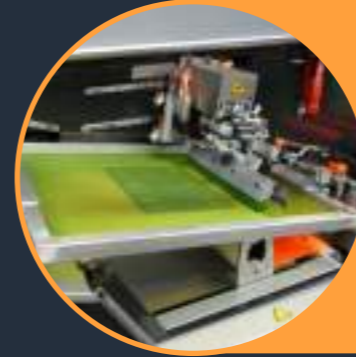
#### Time Saving

With a wide range of automation options and our latest ABC Connect workflow software.

# Beverage Specification

Foil, emboss or screen varnish - whatever your customer desires, the Digicon Series 3 has the modular solution for you.

Perfect for premium labels, you'll be impressed by the quality the Digicon produces. Also, by utilising our intelligently deigned modules, embellishments can now be achieved at increased production speeds without compromising quality.

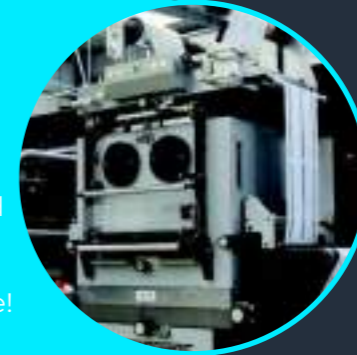


## Flat Bed Screen Printing

With our screen module running at twice the speed of its predecessor, your customer can now have superior quality screen varnish on their labels, whilst you increase your margins.

## Big Foot 50 Tonne Hot Foil & Embossing

Giving excellent foil coverage, the Big Foot applies 50 tonnes of pressure allowing foil to be stamped across and along the web, creating high quality, unique labels that are also cost-effective thanks to foil-save!



Other modules to give you a **competitive advantage**

### Peel and Reveal

Our crossover unit alongside delam/relam and turnbar modules it allows you full flexibility for multi-ply labels.

### Rail Mounting System

Adds greater flexibility for mounting turnbar and lamination options.

### Lamination In Register

Produce full width, multi-layered labels by laminating a pre-printed web to the main web in perfect register.



# Increase your Productivity

Need to speed up production in your finishing department? The FAST Track die is a semi-rotary die that runs up to 180 metres per minute. To automate further, add on the SGTR AutoSet glueless turret rewinder which, if chosen as an option, has quick

change mandrels allowing for different sized cores without compromising production speeds allowing you to perfectly seal your labels with the print and apply applicator or, when combined with a camera, identify less than perfect rolls.



Saves  
**2**  
mins make ready

## Automatic Die Plate Mounting/Removal

Every time you change jobs, flexible dies are mounted accurately and precisely using high resolution cameras.



## Inline/Offline Operation

Have the flexibility to finish labels either inline or offline with the use of our digital interface.



Saves  
**9**  
mins make ready

## Autoslit with Line Gap Sensor

Speed up job changes with this automatic slitting system that also includes an inter-label gap sensor.



Saves  
**2**  
mins make ready

## Iscore Automatic Back Scorer

Automatically set your backscorer, minimising production downtime.

# Digicon Lite 3

The Digicon Lite 3 is an entry level, compact digital finishing system built to the exact same standards as the large, market leading Digicon Series 3.

Capable of running at 64 metres per minute in semi-rotary, it can operate in line (right to left only) or stand alone.

It provides an excellent solution for day-to-day applications and can provide additional capacity at busy times. The Digicon Lite is easy to use and can be specified with a wide range of options to give your business a clear, competitive advantage.

## Easy-to-Use

With intuitive controls and low-cost maintenance.

## Cold Foiling

Produces a great foil finish with a standard flexo plate

## Autoslit with Label Gap Sensor

Saves time by automatically setting knives

## Accurate

Built with precision to ensure consistent results.

## Super Varnish

Produces a premium, high gloss finish

## Iscore

Saves time by automatically setting back scoring knives

## Sheeter

Enables you to finish sheets as well as rolls.

## Flexible

A wide range of options to give you a competitive edge.



# Digicon 3000

The Digicon 3000 is a uniquely versatile 762mm (30") finishing line for digitally printed self adhesive labels, shrink sleeves, flexible packaging and point of sale materials.

In short, the Digicon 3000 can do it all - from rotary and semi-rotary printing and die cutting to laminating, slitting, decoration and perforation. The possibilities are endless. Fully compatible with the HP Indigo 20000 digital press, the Digicon 3000 is

able to work off-line as a stand alone solution or in-line in order to print and finish in a single pass.

All Digicon 3000 systems are configured to meet individual finishing requirements, whether for labels, flexible packaging or both. So, by investing in a Digicon 3000, you can be certain to meet your customers' needs. You will also be able to offer shorter runs, higher quality, greater complexity and faster delivery.





# DigiJet by ABCG

Perfect for short print runs, the DigiJet is able to embellish in high detail from any image source with no tooling costs. Designed to pair seamlessly with all technologies, it can work in full automation mode and is fully compatible with any MIS interface.



Latest digital technology



No tooling required and ease of set up



Flexibility - can work with any graphic file in greyscale



High speed production



Suitable for varnish and cold foil of various thicknesses, and can be adjusted on the fly



Print solid varnished and fine details on the same label, even suitable for tactile triangles



Low maintenance and easy purge procedure, with only one consumable required



Minimise waste from your production



MIS/ERP compatibility



# DigiLase 4.0

The DigiLase 4.0 is the result of continuous development in laser cutting technology made by ABG engineering teams.

The modular configuration allows you to deliver labels on a roll or as individual pieces, depending on your customer's preference.

Designed for short print runs with reduced lead times, the DigiLase 4.0 is perfect for web-to-print businesses.



## **Time Saving**

Fast, fully automated job changeover and simple pre-press set up.

## **Reliable results**

Cutting speed and power are automatically managed by the software developed by ABG.

## **Accurate Finishing**

Digitally controlled fine laser beam for cutting intricate shapes on many materials.

## **Intelligent**

Integrates with any Management Information System (MIS).

## **Simple to configure**

Modules and options to configure the machine exactly as you need.

## **Flexible**

Works across a range of print applications; roll to roll, sheet or individual piece.

## **Quick set up**

No make readies required and saved jobs can be set up for automatic repeats

## **Easy to use**

Intuitive interface with integrated inspection area and no need for hard tooling.



The ABC connectivity system can work in conjunction with any Management Information System (MIS) using an industry standard messaging format.

Providing unrivalled efficiency, this sophisticated technology enables automatic job set-up and changeover in just a few milliseconds, with minimal human intervention.



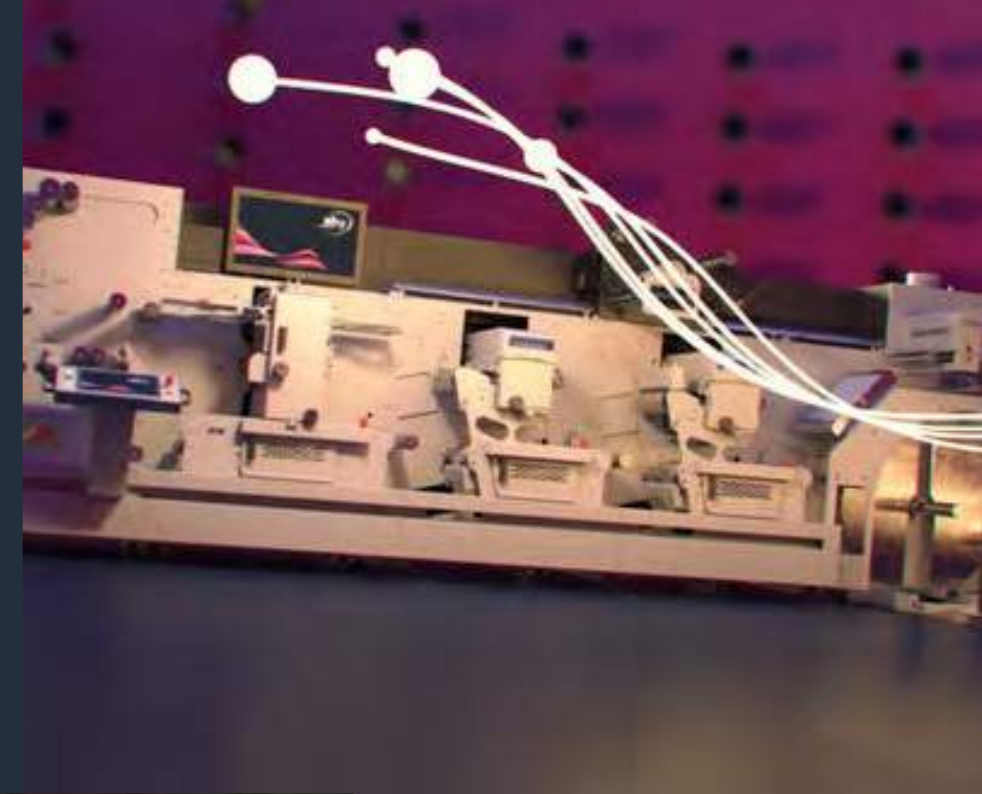
Gives competitive advantage with real time production data for accurate stakeholder reporting



Material saving with faster and accurate setups



Less paperwork with the QR codes removes the need for paper job tickets



Connectivity with all ABC finishing machines managed via a single central server



Faster and more accurate set up reducing risk of operator error



Removes admin tasks from operators freeing up time to concentrate on production



Money saving through increased automation and less need for human resources



Efficient set up allows files to be received directly from the customer's website



# ABG Connect with DigiLase 4.0

Combining ABG Connect and our cutting-edge DigiLase 4.0 can provide you with a highly efficient solution, perfect for web-to-print, short run production. ABG Connect allows you to automatically load new job data into the DigiLase compiler so it is ready for an instant job changeover with zero material waste.

- Minimise Waste
- Reduce Downtime
- Outstrip the competition



“

This is an automated revolution.

**Dr. Adrian Steele**  
Managing Director  
**Mercian Labels UK**

”

## Want to find out more?

Head to our website to learn more about our digital finishing solutions and automated workflow connectivity.



# Enjoy the security of ABG

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65+ years of print finishing expertise



Designed, manufactured, and serviced by ABG



Built with connectivity, automation, and ease of use



Modular approach which means each build can be bespoke to you



Retrofittable options – allowing you to future proof your business

## Head Office

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