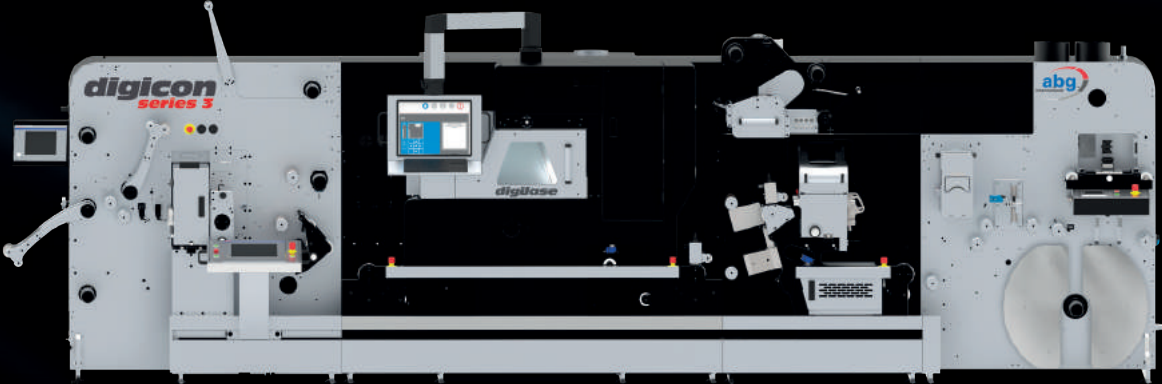# digilase 4.0

Digital **Laser** Converting Machine

Over 60 years of heritage and innovation create the

perfect finish

Your customers depend on you to deliver the very highest quality, in full and on time. Nothing else will do. Your reputation depends on it and our equipment will not let you down.

How can we be sure? That's easy. Our equipment is unrivalled because it has been tried and tested over 60 years.
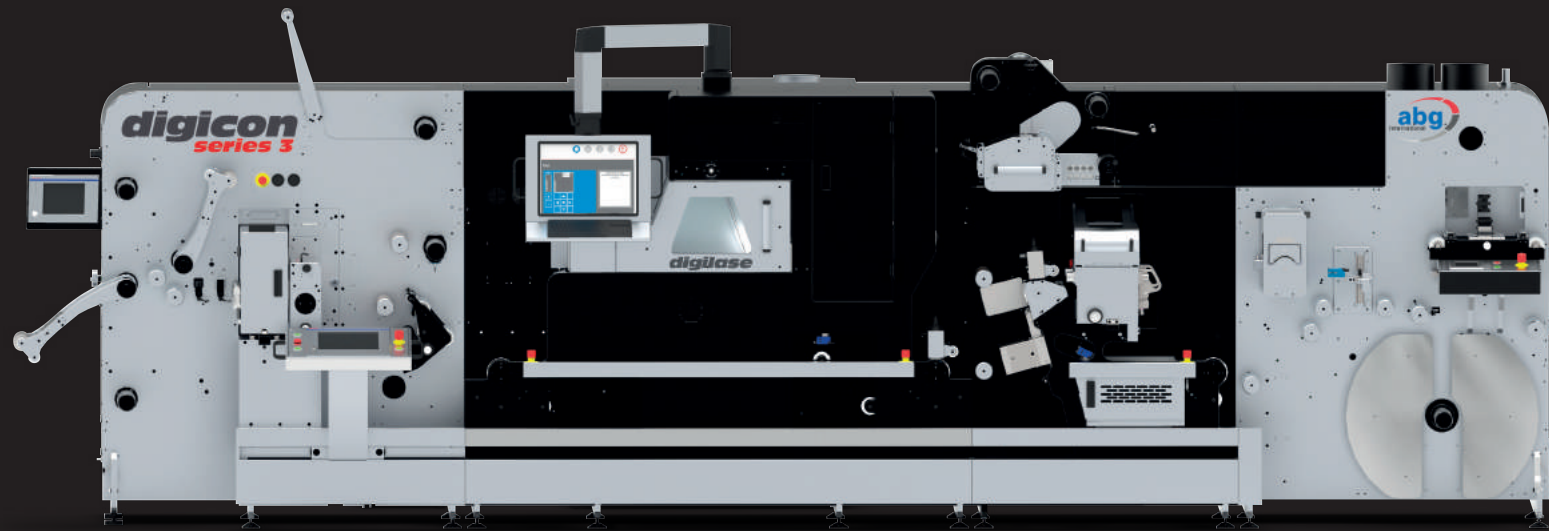
We have been manufacturing innovative print finishing equipment for over 60 years, and our technology has been perfected with our customers' feedback.

It is only by having equipment out there, across the world, working hard for our customers day in day out, that we can understand how to make it better. It is an evolutionary process that takes place over many years, and there are no shortcuts.

The fact that we have been designing and developing finishing equipment for so long, and that we have installed 11,000 machines worldwide for 2,500 customers, speaks for itself.

Our foundations are solid, our technology is proven and our customers return for more. All of this means that you can invest with confidence. It helps too that we are a friendly, family run but global business that cares about its customers and is determined to help them succeed.

AB Graphic International Ltd.

OVER 60 YEARS' EXPERIENCE

OVER 300 EMPLOYEES

OVER 9000m² OF MANUFACTURING FACILITIES

OVER 60 DISTRIBUTORS WORLDWIDE

OVER 11,000 MACHINES INSTALLED

A new world of finishing

digilase 4.0

Fast and efficient Digital laser converter

Following the latest developments in laser cutting technology, we are proud to introduce the Digilase 4.0, the new laser digital cutting machine with the smallest laser beam and the fastest automatic job changeover.

Automatic slitting
(option, also available in manual version)

Automatic back scorer
(option, also available in manual version)

NEW
DIGILASE suite
User-friendly bespoke ABG software with **AUTOMATIC COMPILER**

Chiller and fume extraction system are provided with the machine

HMI sliding touch screen console

190 micron laser beam
the smallest available on the market for the upmost cutting accuracy

Inspection area
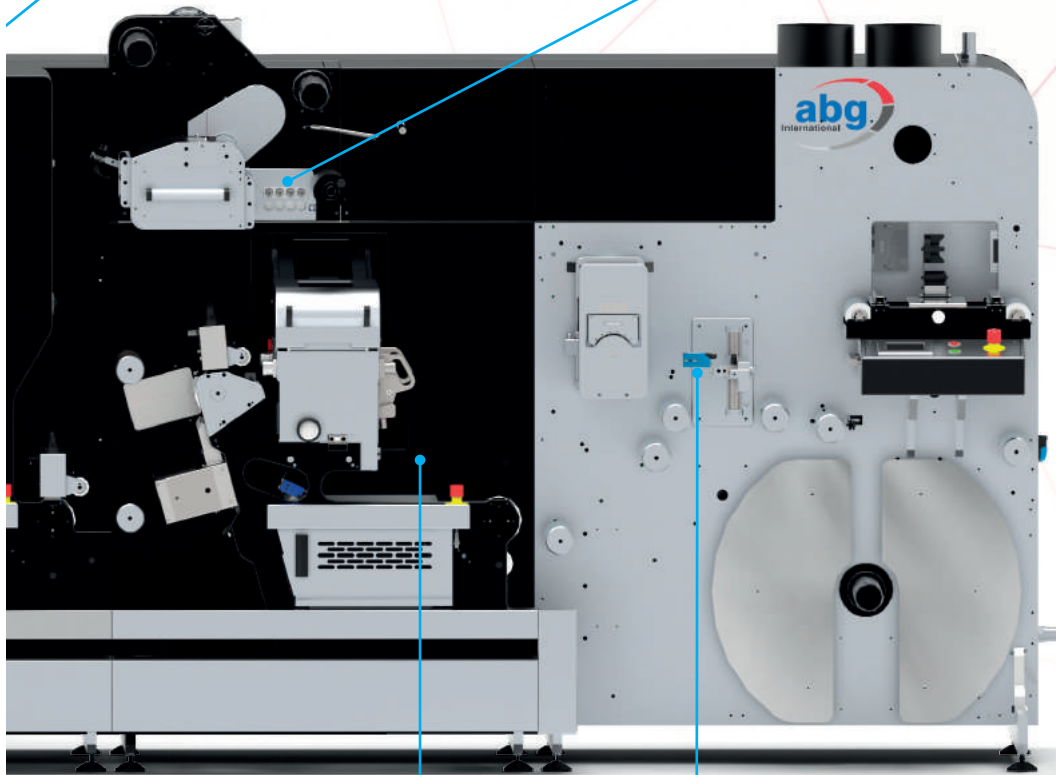Ergonomic height for ease of inspection

Inspection
The guard slides backwards to allow the inspection of the processed material

Over Lamination Unit (option)

Flexo Unit
available as full or semi-rotary (option)

Barcode scanner
to recall the job files from a MIS. Can read 1D & 2D codes (option)

Features & Benefits

- **Intelligent** - full automatic job changeover with MIS integration & file storage
- **Accurate** - cutting speed and power managed by the software to ensure consistent results
- **Flexible** - with modules and options to give you a competitive edge
- **Easy-to-use** - with intuitive controls and low-cost maintenance
- **Time saving** - no make readies are needed and all the jobs can be saved for future use
- **Material saving** - small blank web between jobs
- **Money saving** - no tooling required
- **Fast** - the job changeover only takes a few milliseconds
- **Roll-to-roll or roll-to-sheet** - for any digital printing application
- **Creative** - kiss cutting, engraving, through cutting with bit removal
- **Precise** - intricate shapes, fine contours, sharp or round corners with pin-point accuracy
- **Perfect for web-to-print businesses** - designed for short runs with reduced lead time
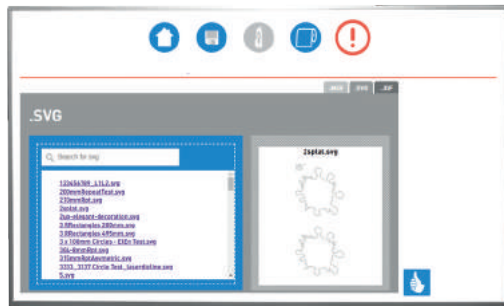
Technical Specification

Maximum running speed	60m/min
Maximum repeat length	unlimited
Field of view	330x330mm
Laser heads	1 x 400W
Laser wavelength	10.2µm
Laser type	Sealed CO2
Laser beam diameter	190 microns
Beam path	Fully sealed and purged
Scan head motion	X, Y & Z axis
Minimum job length	2 metres
Maximum inter job gap	500 mm
Registration tolerance	+/- 0,15 mm
Through cut bits maximum size	20 x 20 mm
Job changeover time	5 milliseconds
Max unwind roll diameter	800mm
Unwind mandrel diameter	76mm
Rewind roll diameter	600mm (upper shaft) - 800mm (lower shaft)
Rewind mandrel diameter	76mm (other sizes available)
Product classification	Class 1

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www.**abgint**.com
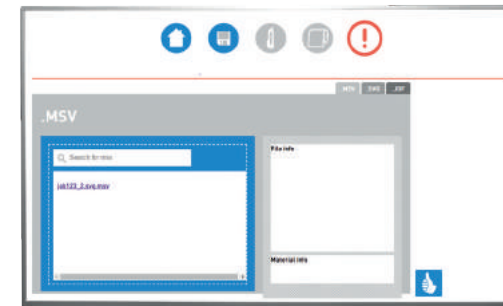
![digilase 4.0]

Automatic Compiler
When running in manual mode the job files can be automatically compiled in just 2 steps
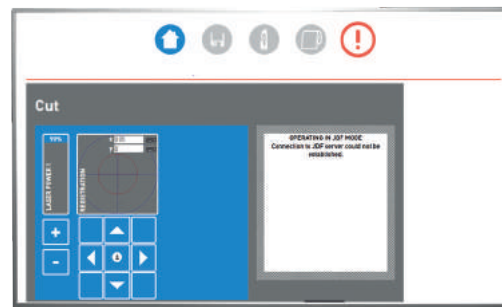

Step one: Select the die line

Step two: Select the material

Job complied and ready to go

The registration and laser power can be adjusted on the fly by the operator if needed

Benefits

• **Highest cutting quality** - Speed and power are worked out by the software

• **Efficiency** - No need for a skilled operator

• **Flexibility** - Speed and power can be adjusted on the fly if needed

• **Low risk of human error** - The software automatically creates the best laser path with no need of manipulation from the pre-press

digilase 4.0

Recommended options for fully automated workflow

SAVES 2 MINUTES MAKE READY

CAN SAVE UP TO 9 MINUTES MAKE READY

Barcode reader
To recall job files from a MIS in just a few milliseconds. Can read 1D & 2D codes.

Flexo unit
Full or semi-rotary for consistent flood varnishes or accurate spot varnishes

Over-lamination
Available in self wound version or suitable for cold foiling/super varnishing and for handling laminate with or without carriers.

Auto backscore
Automatically set your backscorer, minimising production down time.

Auto slitting
Each knife automatically positions itself for improved workflow.

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Over 1500 digital machines installed worldwide

Benefits
- Fast make readies
- Minimum input from the operator
- Instant job changeover
- Maximum setup accuracy
- Consistent production quality and job repeatability

digilase 4.0

ABG JDF/JMF System applied to the Digilase

Can work in conjunction with any MIS

What is JDF?

A **Job Definition Format** file is created in a Management Information System (MIS) and transfers job data from the MIS to the finishing machine and the modules capable of automatic set up.
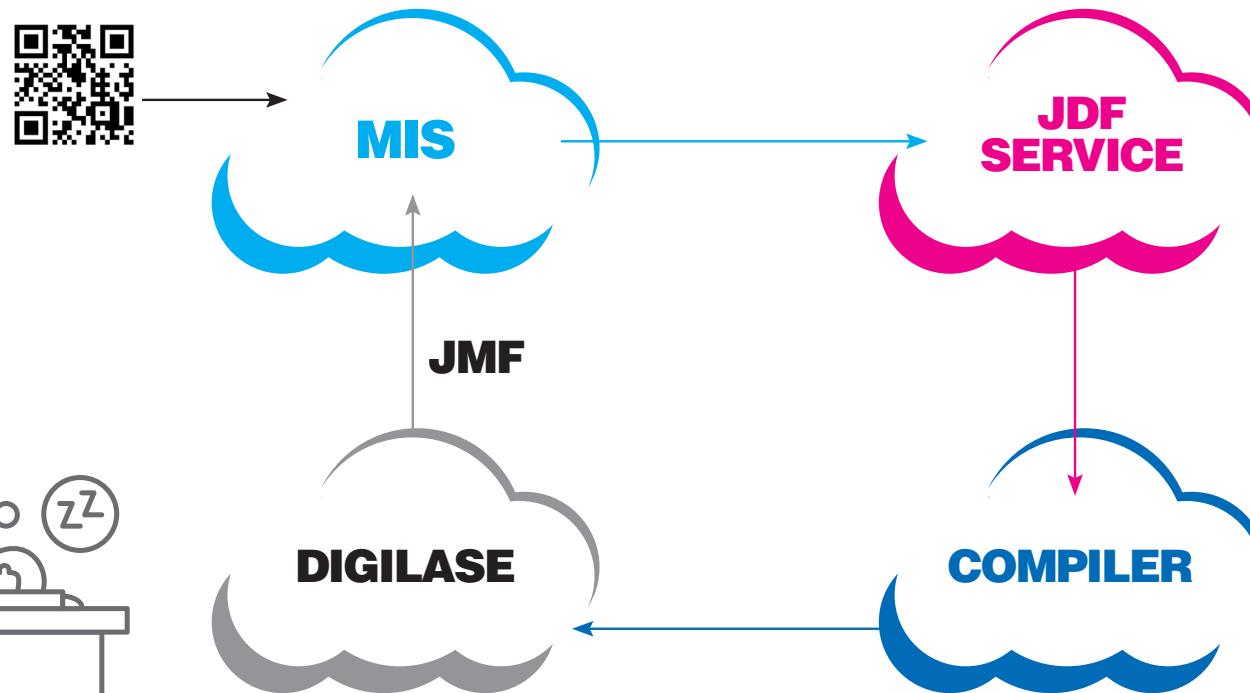
What is JMF?

A **Job Messaging Format** file returns real time information from the finishing machine back to the MIS.

Typical JMF messages:

- Device (machine) status
- Job status
- Job description
- Production counter
- Time stamp
- Operator name
- Waste control

Operator

MIS

JDF SERVICE

JMF

DIGILASE

COMPILER

Automatic job changeover with MIS

For further information please talk to our specialists

Benefits

- **Connectivity with all ABG finishing machines**
  single central server for the management of all the
  ABG machines running in the workshop

- **Faster and more accurate set up**
  reducing risk of operator error

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

- **Accurate WIP control** - real time data for accurate costings,
  identifying where jobs are in the production process

- **Gives competitive advantage** - accurate
  reporting to stakeholders on production throughout

- **Material saving** - with faster and accurate setups

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

- **Money saving** - less need for human resources

- **Advanced** - the production process can be easily
  monitored from the app of the MIS (if available)

- **Efficient** - can receive files directly from the website
  which don't need additional checking from the pre-press

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100% ABG developed software
500 average job per day
5 milliseconds job changeover
0.0 seconds downtime

CLASS 1
Laser product

The Digilase module
has been approved as a
Class 1 (non-dangerous)
laser product and is also
FDA approved

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digilase 4.0

JETFX inkjet digital embellishment

JETFX and DIGILASE: the perfect digital combination

The JETFX is the new modular inkjet embellishment unit of the DIGICON series which can be integrated with the DIGILASE to get a fully digital finishing solution for your self-adhesive labels.
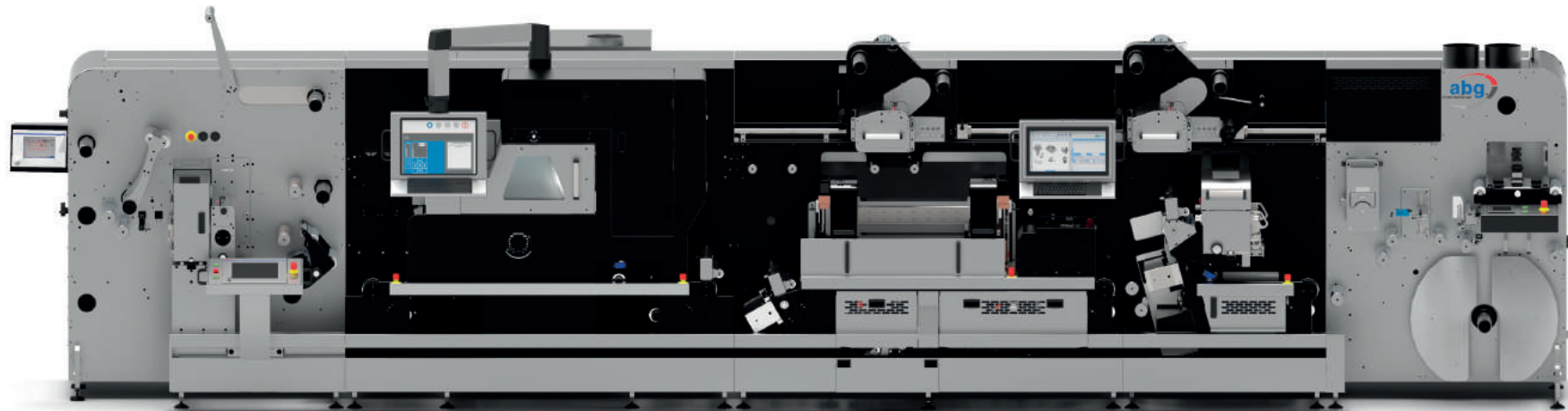
Capabilities

- Cold foil
- Varnish
- High-build varnish for tactile effect
- Cast and cure

Benefits

- Use any image as source
- Highly detailed printing
- No tooling required
- Can work in full automation mode through a MIS

digilase 4.0 JETFX Label Samples

Service & Support

Our business's success depends upon the capability and reliability of our machines and we understand that your business's reputation does too. It is why we put so much effort into getting things right, first time, every time.

It's essential of course that each machine and every component is fit for purpose and reliable, having been tried, tested and refined. This enables our customers to trust our equipment and go on, in large numbers, to invest in more.

However, parts can wear out over time and all equipment must be regularly serviced to ensure the best output. Occasionally, things can go wrong. When the worst happens, it's incredibly important to have a responsive, understanding service partner that can get you back up and running as soon as possible.

We believe that you can tell the quality of any business by the way it deals with problems. Our customers tell us that we are the best. With service teams ready to help across the globe, and an extensive stock of spare parts for almost every piece of equipment we have ever built, we are ready and able to help.

So confident are we in the effectiveness and reliability of our equipment, that we offer a comprehensive one-year parts and labour guarantee. We provide this service through our wholly owned companies in the UK, Germany, USA, France, Holland and Spain. Elsewhere, aftersales support is delivered by our distribution partners.

Contact us

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Bridlington,
YO15 3QY, England

Tel: + 44 1262 671138

Email: info@abgint.com

Website: www.abgint.com

Images may show options not included on standard machines.