Watkiss DigiVAC Collating and Finishing System



CREATIVITY | ACCURACY | EFFICIENCY



66 Our Watkiss finishing systems have proved reliable and straightforward to use. The units are flexible and set-up is very fast. A good investment and a testament to British innovation and quality. ""

Kevin Assinder The Complete Product Company

Non-Stop Production

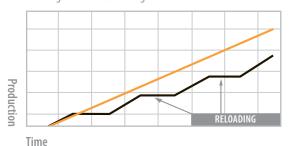
The Watkiss DigiVAC combines reliable sheet feeding with a constant work-flow to make it the most productive and easy-to-use collator ever.

The revolutionary patented suction feed system feeds sheets from the bottom of the stack. You reload the bins while the machine is still running, before the bins actually run out. The result is non-stop productivity. A conventional collator stands idle up to 50% of the time while the operator reloads the bins; so the productivity gains of the DigiVAC are easy to see. There is no need to purchase extra bins or towers to achieve loading-on-the run, so capital outlay is also reduced.



Production Over Time

Collating and Booklet making



- DigiVAC & booklet maker
- Conventional collator & booklet maker

Easy to use and Operator Friendly

Continuous operation produces more reliable feed since the paper stack is constantly aerated - all collators run better when they are not stop/starting.

This constant workflow has another benefit - bin loading is less strenuous for the operator, who can load a comfortable handful of stock at a time without losing productivity. The DigiVAC's unique suction feeder design dramatically reduces the need for adjustment.

The intelligent control system removes all of the guess work for the operator. Bins automatically switch on when they are loaded and once the job is started, the bins are security locked to prevent operator error. The detection system is self-calibrating and automatically compensates for minor stock variations. Various operating modes for collating preset quantities, feeding covers or for running batches are easily programmed.

The DigiVAC has an integral dynamic hand-merge station which means booklets comprising more than 8 or 12 sheets can be produced in two stages by hand merging two partial sets.

DigiVAC Plus

Most customers choose the DigiVAC+ model which features a colour touch-screen user interface. This controls all connected equipment, including stacking, stitching, folding and trimming, as well as the collator itself. Job settings and memories are applied across the entire system for greater ease of use and fast set-up. Add to that the on-screen help and multiple language options, and you can see why the Watkiss user interface is the envy of the industry.

Special Applications

Special applications, including selective feeding, customised sets and integration within other systems are available on the DigiVAC+. Advanced programming features allow you to programme special feed sequences onscreen without the need for an external computer. Alternatively, external communication with other machines or systems via RS232, Ethernet or CAN is supported if required.



Non-Stop ProductionLoading on the run gives non-stop productivity.



Perfectly Aligned SetsThe straight jogger is perfect for stacking carbonless sets.



Set Security

The unique Watkiss SMART detection system is in every bin, continually averaging and fully compensating for ambient light conditions.



Intelligent stacking

Criss-cross or straight stacking, with programmable batches.



HandMerge Sets

Produce thick booklets using the built-in dynamic handmerge station.



Integrated Control

Control the entire finishing system, collator, stacker and booklet maker from the central colour touch screen. (DigiVAC+ only).

Additional Benefits

- Patented flat suction feed from the underside of the paper stack
- No need to purchase extra bins or towers to obtain loading-on-the-run
- Very gentle on delicate papers and digital print
- Centre-referenced feed collates mixed sizes with ease
- Operator friendly less strenuous to run
- Set counter and preset counter
- Batch mode for cover feeding and batch inserting
- Flexible bin linking to maximise bin utilisation
- In-built faulty set handling facility
- Bi-directional delivery to front or back, for stacking or booklet making

- Virtually maintenance free, no lubrication and no consumable parts
- DigiVACs can be upgraded from 8 to 12 bins and from standard DigiVAC to DigiVAC+



Booklet Makers

Booklet making options for the DigiVAC include the BookMaster Pro staple-fold which uses staples from a cartridge; or the Automatic Stitch-Fold which uses wire reel-fed stitch heads.

The best booklet maker for you will depend on your overall workload, run length and required production rate.

Both booklet makers can fold, stitch-and-fold, edge-stitch, edge-stitch-and-fold, and corner-stitch.



Automatic Stitch-Fold and Trim

The Automatic Stitch-Fold and Trim units are the professional choice for high production stitching, folding and trimming. They provide high volume users with consistent accuracy and reliability.

Fully automated, all the settings for sheet size, fold and stitch position, book thickness and trim margin are set to within 0.1mm from the DigiVAC's colour touch-screen. Pre-defined settings for standard sheet sizes make setup fast, precise and easy. Additional memories store custom jobs settings for future use.

The patented clamshell design makes the Automatic Stitch-Fold remarkably compact. It provides the collated set with a near vertical infeed paper path, resulting in well aligned sheets and accurate books every time. It also makes it suitable for books that have mixed sheet sizes - an A4 booklet, with a loosely bound flat A4 sheet inside, is an example.



Automatic Stitch-Fold and Trim

For a perfect finish, especially on thicker books, the optional online trimmer clamps the spine and trims the fore-edge with a high speed steel blade which has a self-sharpening scissor action. For full-bleed work, the optional two-knife trimmer trims the top and bottom edge of the booklet. Finished booklets are delivered onto a high capacity outfeed conveyor, or into the optional SpineMaster.



Accurate Control

You have absolute control of the set at every stage of the process, ensuring consistent results even with difficult papers.



Side-fed Stitch Heads

Side-fed stitch heads are fitted as standard, for proven reliability and low maintenance.

Additional Benefits

- Compact
- Robust
- Automatic setup and integrated control from the collator
- Wide range of sheet sizes, adjustable to 0.1mm
- Centre referenced

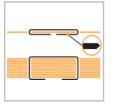
BookMaster Pro and TrimMaster Pro

The BookMaster Pro booklet maker and TrimMaster Pro trimmer combine maximum performance with cost effectiveness. They are simple to operate and low maintenance, making them by far the most advanced, user friendly and reliable staple-fold booklet makers available today.

The BookMaster Pro has a unique low impact stapling mechanism that ensures virtually maintenance free operation. The main wearing parts are included in the staple cartridge and are replaced every 5,000 cycles when the cartridge is changed. As a result, over one million cycles can be run before staple head maintenance is required.

The BookMaster Pro has automatic set-up to adjust the sidelays, endjog and staple/fold position. When used on-line with a DigiVAC+ collator, the collator's colour touch-screen runs the entire system.

The optional TrimMaster Pro trimmer has a single self-sharpening hardened steel blade to neatly trim the fore-edge of the book.



High quality staples

The low impact stapling mechanism with moving clinches produces flat, well formed staples over the full range from 2 to 22 sheets.



Maintenance free staple system

Changing the staple cartridge automatically replaces the main wearing parts.



All trimmings are transported outside the machine to an external waste box allowing continuous operation.

For full-bleed work, the optional two-knife trimmer trims the top and bottom edge of the booklet. Finished booklets are delivered onto a high capacity outfeed conveyor, or into the optional SpineMaster.

Additional Benefits

- Professional standard build quality
- Staples are well formed from 2 to 22 sheets
- Fully automatic size adjustment
- Top-jog produces good performance with heavy art papers
- External trimmer waste-bin

2-Knife Trimmer

The Two-Knife Trimmer is a compact unit that trims the top and bottom edge of stitched or stapled booklets. It completes a single-pass booklet making system to give a professional and cost effective solution for full-bleed printed work.

It is perfect for a wide range of traditional and ondemand applications, where the booklets are quickly finished in one streamlined operation without the need for additional handling or finishing steps.



SpineMaster

Add value to your booklets by applying a SquareBack finish with the Watkiss SpineMaster. It gives you the superior appearance of a perfect bound booklet combined with the security of a stitched spine.

The SpineMaster transforms traditional stitch-fold booklets into square-spined SquareBack books that are flat and easy to pack, stack and handle. There is no risk of loose pages and you can even print on the spine.

While traditional booklet making achieves a satisfactory result on thin booklets, the more sheets you use, the more the book will "gape" at the spine. The SpineMaster re-forms the spine into a square shape to produce a long lasting, high quality finish.

The SpineMaster fits after the trimmer units and the unique SquareBack process ensures that no additional trimming is required.

After processing, the SquareBack booklets are delivered into a stacking hopper on the top of the unit, where they are easily removed by the operator. If required, booklets can bypass the SquareBack process and are delivered directly to the hopper. Similarly, individual booklets can be hand fed into the unit if required.

SquareBack book technology, which was developed and patented by Watkiss, is now the preferred choice of printers and print buyers all over the world.



Before and After

Traditional stitch-fold booklets are transformed into SquareBack booklets.



SquareBack Booklets

Flat booklets are easy to handle, stack and pack.



Print on the Spine

SquareBack booklets can carry print on the spine, just like a perfect bound book.



Online or Offline

Hand feed or operate online, the choice is yours.



Watkiss DigiVAC Collating and Finishing System

Specifications	DigiVAC	DigiVAC Plus
Configuration	8 or 12 bins, single tower	8 or 12 bins, single or two towers
Production	Up to 3,500 sets per hour continuous (non-stop) production	Up to 7,200 sets per hour continuous (non-stop) production
Bin Capacity	Up to 60mm (continuous loading-on-the-run makes the feeder capacity logically unlimited)	
Sheet Sizes	120 x 200mm to 350 x 500mm	
Stock Range	50 to 300gsm+ (Coated: minimum 90gsm when booklet making)	
Detection	Electronic detection for miss, double, jam and empty bin. Totally automatic and self-calibrating, no adjustment required.	
Control	5-digit LED display	Colour touch-screen graphical user interface provides integrated control for the entire system
Stacking	Straight Jogger, Criss-Cross X-Jogger	
Booklet Making	Watkiss BookMaster (staple-fold and trim) Watkiss Automatic Stitch-Fold and Trim	
Options	2-Knife trimmer, Watkiss SpineMaster	

Booklet Making

Specifications	Automatic Stitch-Fold	BookMaster Pro
Production	Up to 3,300 per hour	Up to 2,500 per hour
Max/Min Input Size	160 x 120mm to 500 x 350mm	210 x 140mm to 482 x 320mm
Max Booklet Thickness	25 sheets (of 80gsm)	22 sheets (of 80gsm)
Stapling/Stitching	Deluxe side fed stitching heads 0.53mm (25 gauge) round wire Options: Hohner heads, Loop stitching	Low impact stapler with moving clinches 5000 capacity staple cartridge (includes the driver and former)
Max/Min Stitch Pitch	86* to 278mm (from centre of stitches) *68mm with adjustment	115mm /138mm/corner
Operating Modes	Stitch, fold, stitch and fold, edge stitch, edge stitch and fold, corner stitch	Staple, fold, staple and fold, edge staple, edge staple and fold, corner staple (with optional 3rd staple head)
Fore-edge Trimming (option)	Automatic Trimmer Max. 35mm trim	TrimMaster Pro Max. 25mm trim
Side trimming (option)	Min/max booklet height before trimming: 204 – 340mm Min/max booklet height after trimming: 200 – 320mm Max. 35mm trim	
Delivery	Outfeed conveyor, SpineMaster	
SpineMaster (option)	Production: up to 1750 per hour, single pass up to 1150 per hour, double pass* *double pass mode may be used for thick books, with stiff covers; the book is automatically processed twice for optimum results.	





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