

Watkiss PowerSquare™ 200

“ We have had the Watkiss PowerSquare finishing system for two years now, it's performance and finish quality are second to none. I would highly recommend this machine to anyone who is looking for a professional finish. ”

Nigel Reynolds - University of Cambridge



Offline hand-fed
Watkiss Powersquare

A unique and innovative 'complete book making system'

The Watkiss PowerSquare 200 is a unique and innovative complete book making system for digital and offset print applications. In a single machine it combines the four processes of stitching, folding, spine forming and trimming to produce SquareBack books up to 200 pages thick. It features fully automatic settings for different book size and pagination, including variable stitch leg length for varying book thickness.

The maximum book thickness, of 10mm (200 pages 80gsm), is double that of alternative conventional booklet making machines, so it is ideally suited to higher paginations or to thicker stocks. This makes the Watkiss PowerSquare 200 a fast and cost effective alternative to perfect binding or tape binding. Digital print applications frequently use heavier stocks and need the flexibility to produce a wider range of finished books from a single process, with little or no operator intervention - the new Watkiss PowerSquare is a perfect match.

SquareBack Books

The finished SquareBack books have the superior square-spined appearance of a perfect bound book, but with the security of a stitched spine. They lie flat and are easy to pack, stack and handle. There is no risk of loose pages and you can print on the spine.

Consistent, Quality Stitching

The PowerSquare has a single stitch head which inserts one to six stitches in the spine of the book. The stitch head and clincher are static - the sheets move to the stitch, not vice versa. This means the stitch head and clincher never have to be moved, so alignment and stitch quality is consistently good.

Space-saving, Ergonomic Design

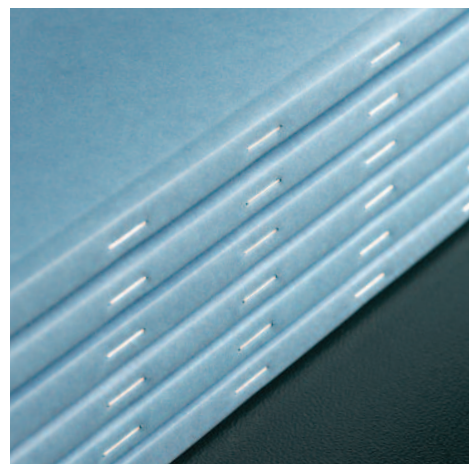
The PowerSquare has a very small floorspace requirement - significantly less than alternative book finishing methods. What's more, when operating online to a printer, the finished books are delivered close to the normal operator position - not several metres 'down the line'.

Easy to Use

The PowerSquare is extremely easy to use. Simply enter the job parameters (paper size, book thickness and number of stitches) into the touch-screen and press 'start'. The PowerSquare automatically sets the stitch position, the wire draw length (the stitch leg length), the amount of spine form required and the trim dimension. To make repeat jobs easier still, you can save the settings, each with a unique name, for instant recall when required.

Online or Offline

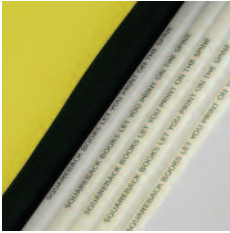
The PowerSquare is available in online or offline configurations. Online versions include automatic sheet rotation to suit the book making process whilst maximising printing speed. For offline applications, a high speed sheet feeder can be connected, or the Powersquare is available as a hand-fed model providing a flexible book making solution which is instantly ready.





A Single Solution

It is a single solution for books from 8 - 200 pages. No other book making system offers this flexibility.



SquareBack Books

SquareBack books can carry print on the spine, just like a perfect bound book. They are easy to handle, stack and pack.



Double Book Thickness

10mm (200 pages of 80gsm paper) is twice that of conventional machines.



Thin Books

The SquareBack finish can be switched off for thin books, if required.



Automatic Sheet Rotation

Sheets are automatically rotated into the correct orientation for booklet making.



Single Heavy Duty Stitch Head

Insert from 1 - 6 stitches. The static stitch head ensures consistent alignment and quality.



Instant-On

There is no warm-up time, so the machine is always ready to run.

Xerox Nuvera Printer

Watkiss PowerSquare 200



The Choices

Offline hand-fed model
 Offline with PowerSquare Sheet Feeder (page 36)
 Online to compatible printers
 PowerSquare Book Stacker (page 34)

Printer Compatibility

- Océ VP2000, VP4000 and VP6000 series
- Xerox Nuvera 100/120/144/200/288
- Kodak DigiMaster EX110, EX125, EX138, EX150, EX300
- Konica Minolta bizhub PRO 1600P, 2000P, 2500P
- Canon imageRUNNER Pro 7110VP, 7125VP, 7138VP, 7150VP
- Canon iR 110Vpe, 125VPe, 138VPe, 150VPe



PowerSquare on
Océ VarioPrint printer



Offline
hand-fed
PowerSquare

Specifications	Online	Offline
Production (Rel.3)	Dependant on the number of stitches and book thickness Cycle time: Printer dependant Inter-set gap: 1.0 seconds Minimum set time: 4.4 seconds	Typical set time: 7.5 seconds
Stock Sizes (input size)	200 x 200mm Minimum 340 x 500mm Maximum	120 x 200mm Minimum 370 x 520mm Maximum
Sheet Rotation (Online machines)	Integrated rotator ensures maximum printer productivity. Maximum rotation sheet size: 320 x 227mm Minimum rotation sheet size: 207 x 200mm	
Stock Range	70 - 250gsm dependant on paper type and quality	
Book thickness	Minimum set thickness: 2 sheets (when folded makes an 8 page booklet) Maximum finished book thickness: 10mm (approx 200 pages 80gsm) Maximum set thickness: 5mm (approx 50 sheets 80gsm)	
Stitching	1 - 6 stitches, evenly spaced on the spine of the book Stitches/spool: up to 291,500 Books/spool: approx 127,000 (20 sheet, 80 page 80gsm book)	
Trimming	Maximum fore-edge trim: 28mm Minimum trimmed book size: 80mm	
Features	• Makes books from 8 - 200 pages • Produces SquareBack books • Heavy duty side-loading stitch head • Fully automated	
	• Ergonomic design • Small footprint • Instant-on, no warm up time • Low power requirements	

Watkiss PowerSquare™ Book Stacker

By running unattended for extended periods, the PowerSquare Book Stacker delivers huge efficiency gains.



PowerSquare Book Stacker

The PowerSquare Book Stacker delivers huge efficiency gains by allowing the Watkiss PowerSquare Booklet Maker to run, unattended, for extended periods.

This new accessory stacks finished books vertically which is extremely space efficient; and it requires very little additional floorspace. With a capacity of 930mm, it can run for up to an hour without operator intervention. The stacker accommodates different sized books without adjustment and can be unloaded on-the-run to give uninterrupted production.

The PBS connects to both online and offline Watkiss PowerSquare Booklet Makers. The PowerSquare connects to most high volume sheet fed printers, and its capability for books up to 50 sheets (200 pages) thick means that it handles an exceptionally high throughput. The new PBS Book Stacker makes this type of work much more efficient for high volume users.



Stack different sized books without adjustment

Specifications	
Production	Operates at the same speed as the Watkiss PowerSquare, no productivity loss
Capacity	Up to 930mm stack of books
Book sizes	Accommodates all output sizes from the Watkiss PowerSquare
Features	• Operates unattended for extended periods • Stacks different sized books without adjustment • Unload on-the-run • Very space efficient • Easy access for maintenance

Watkiss PowerSquare™ Sheet Feeder

A nearline solution that gives great flexibility, especially when you want to finish the output from multiple printers.



PowerSquare Sheet Feeder

The PSF PowerSquare Sheet Feeder, combined with the Watkiss PowerSquare booklet maker, is a high-speed near-line booklet making solution for digital printers.

This combination automatically converts stacks of pre-collated documents - from colour or monochrome digital presses - into high quality stitched booklets. This near-line solution gives great flexibility, especially when finishing the output of multiple printers.

The PSF feeds up to 12,000 sheets per hour and includes a separate cover feeder. It is equipped with large suction belts which are well proven to reliably feed a wide range of printed papers. Automatic sensors, which require no calibration, check for miss or double feeds to prevent faulty sets from being processed.

The number of sheets in each document can be controlled via the user interface - or the inbuilt OMR (optical mark recognition) sensors can detect the end of each set. OMR sensing means that variable sized sets can be handled and ensures job integrity. An optional barcode reader is also available.

The sheets are transported into the PowerSquare booklet maker where, when the set is complete, they are stitched, folded, formed and trimmed into SquareBack books.

For operator convenience, the PSF accepts pallets of printed paper directly from a wide range of digital printers* - the pallet is simply wheeled from the printer to the feeder. Alternatively sheets from unsupported printers can be manually loaded into the PSF.

*** supported printers:**
Xerox DocuTech and Nuvera - DS5000 and DS3500 stackers
Kodak Digimaster - high capacity stackers
Océ Varioprint 5000 - high capacity stackers
HP Indigo 3500, 5000, 5500 and 7000



PowerSquare Sheet Feeder with
PowerSquare 200 and Book Stacker



PowerSquare Sheet Feeder
with PowerSquare200

Specifications

Production	A4 (long edge feeding) up to 12,000 sheets/hr A4 (short edge feeding) up to 9,000 sheets/hr A3 up to 6,300 sheets/hr SRA3 up to 6,000 sheets/hr
Stock Sizes	Stock width (cross track) 200 to 340mm Sheet length (in track) 203 to 520mm
Stock Range	70 – 250gsm
Feeder Capacity	Upper feeder 152mm Lower feeder 500mm
Features	• High capacity sheet feeder • Includes separate cover feeder • Reliable suction feed system • OMR or optional barcode reader • Easy loading of paper pallets from printer