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morgana
PowerSquare 224
Engineered by Watkiss

PowerSquare™ 224

// Plockmatic Group

SMART CHANGE STARTS HERE.



POWERSQUARE™ 224 AND 224VF

PowerSquare 224™ **Highly Productive...**
the complete book making system

POWERSQUARE™ 224

The Morgana PowerSquare™ 224 is a unique and innovative complete book making system designed for high production environments. In a single machine it combines the four processes of stitching, folding, spine forming, and trimming to produce SquareBack™ books up to 224 pages thick. No other book making system offers this flexibility.

The hand feed PowerSquare™ 224 has a multitude of uses, including manuals, magazines, programs, academic journals, financial reports, and education materials.

One of the unique features of the 224 is that it has up to six staples in one set, making it suitable for demanding handfed applications. The optional P2T Full Bleed Trimming module enables you to increase productivity and efficiency.

The proven SquareBack process produces a superior quality finish, and with the automatic set thickness sensing, it ensures optimum book quality to deliver professionally finished booklets for you—and your customers.

POWERSQUARE™ 224 AND 224VF

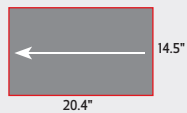
“Renowned PowerSquare
build quality for long term
reliability and performance.”

THE POWERSQUARE 224 AT A GLANCE

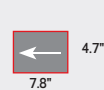
- Automatic staple-to-fold tracking gives improved quality with consistent and accurate staple position on the spine.
- Integral face trimming produces a professional finish by removing the shingle-edge caused by folding multiple sheets.
- Full bleed two knife trimming is available as an option.
- Makes books from 4 – 224 pages.
- Produces high quality SquareBack™ Books.
- Inserts 1 – 6 stitches.
- Fully automated.
- Ergonomic design.
- Small footprint.
- Instant-on, no warm-up time.
- Low power requirements.
- Renowned PowerSquare build quality for long-term reliability and performance.

The PowerSquare 224 Handfed book sizes

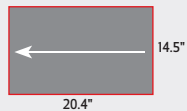
Max. Paper size:
20.4" x 14.5"



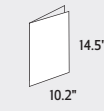
Min. Paper size:
7.8" x 4.7"



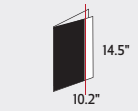
Max. Paper size:
20.4" x 14.5"



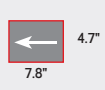
Max. Folded size:
10.2" x 14.5"



Max. Book size:
10" x 14.5 (0.2" trim)



Max. Paper size:
7.8" x 4.7"



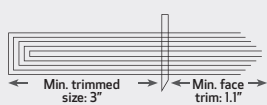
Max. Folded size:
3.9" x 4.7"



Max. Book size:
3" x 4.7"



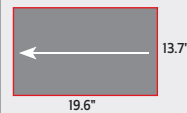
Trimming



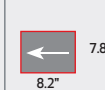
- Max. face trim: 1.1"
- Recommended min face trim : 0.03"
- Min. trimmed book size : 3"
- Max. trimmed book size : 10"

The PowerSquare 224VF book sizes

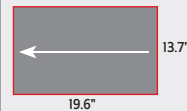
Max. Paper size:
19.6" x 13.7"



Min. Paper size:
8.2" x 7.8"



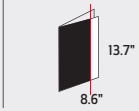
Max. Paper size:
19.6" x 13.7"



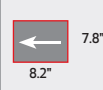
Max. Folded size:
8.8" x 13.7"



Max. Book size:
8.6" x 13.7 (0.2" trim)



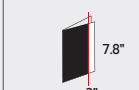
Max. Paper size:
8.2" x 7.8"



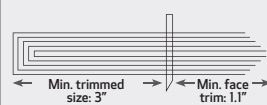
Max. Folded size:
4.1" x 7.8"



Max. Book size:
3" x 7.8"



Trimming



- Max. face trim: 1.1"
- Recommended min face trim : 0.03"
- Min. trimmed book size : 3"
- Max. trimmed book size : 8.6"



POWERSQUARE™ 224 AND 224VF

Produce **booklets**
up to 10mm thick
with the
PowerSquare™ 224

POWERSQUARE™ 224VF - NEW FEEDER

The New PowerSquare™ 224VF, with its high capacity dual bin feeder, offers a flexible solution for a wide range of booklet types and sizes. The system is fed by the VF vacuum assisted feeder which has a loading capacity of up to 21", giving long, uninterrupted production runs. Pre-collated sets can be placed into both bins for longer runs, or covers can be placed into one of the bins when they need to be merged with collated sets. The feeder can also be loaded on the run with automatic bin switching.

Optional barcode readers can be fitted to the VF for variable page count jobs or to ensure set integrity.

SQUAREBACK BOOKLETS

With an ever-increasing demand for high quality booklets on a wider range of media, the PowerSquare™ 224 and 224VF will deliver booklets produced with the unique SquareBack™ finish to the spine. The proven SquareBack™ process produces a superior quality finish. The automatic set thickness sensing ensures optimum book quality to deliver professionally finished booklets for you and your customer.

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

The Power Square™ 224 and 224VF can produce a wide range of formats including 4.1" x 5.8", 8.5" x 5.5" and 8.5" x 11". Booklets of up to 224 pages of 70gsm, or up to a thickness of 0.4", can easily be produced, replacing the need for perfect binding of many publications.

AT BRITISH VIEWS



Produce **books as small as A6** when using the **2-knife trimmer**, complete the booklet making process by **trimming the top and bottom edge** of the **book**.

KEY FEATURES:

- **Paper Size 224VF** – Min: 4.7" x 8.2", Max: 13.7" x 20.4"
- **Paper Size 224** – Min: 4.7" x 7.8", Max: 14.5" x 20.4"mm
- **Stock Range 224VF** – 16lb - 111lb, bond dependent on paper
- **Stock Range 224** – 16lb - 111lb, bond dependent on paper
- **Minimum set thickness** – 1 sheet 21lb bond (when folded makes a 4-page leaflet)
- **Maximum finished book thickness** – 0.2" (approx 52 sheets 21lb bond, 56 sheets 18lb bond)
- **Stitching** – Auto-adjusting stitch pitch according to sheet size and amount of stitches, range 0.9"-12.6"
- **Stitch** – 1-6 stitches in each book, Stitches/spool: up to 291,500 Books*/spool: approx 127,000

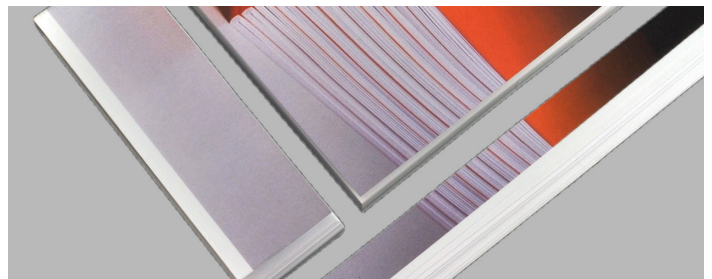
**Standard book is made from 20 sheets of 21lb bond paper, with 2 stitches*

POWERSQUARE 224VF WITH INTEGRATED TWO-KNIFE TRIMMER (P2T)

The PowerSquare 2-Knife Trimmer (P2T) completes the booklet making process by trimming the top and bottom edge of the book. It provides a professional solution for full-bleed printed work, essential for color printed applications.

Side-trimming the finished book gives a clean, sharp, and accurate result. Up to 40mm/1.57" can be trimmed from each end of a book, while the trim position can be offset to match the image position to produce a professional finish, removing the shingle-edge caused by folding multiple sheets.

Full bleed two-knife trimming is available as an option.





POWERSQUARE™ 224VF

The **PowerSquare** will run, unattended, for extended periods delivering **huge efficiency gains** for your business.

The PowerSquare Book Stacker (PBS) delivers huge efficiency gains by allowing the PowerSquare to run, unattended, for extended periods.

The PBS stacks the finished books vertically which is extremely space efficient; the compact unit requires very little additional floor space.

With a capacity of 36", it can run for up to an hour without operator intervention. The stacker can be unloaded on-the-run and accommodates different sized books without adjustment, giving you uninterrupted, efficient book production.





STATIC STITCHING HEAD

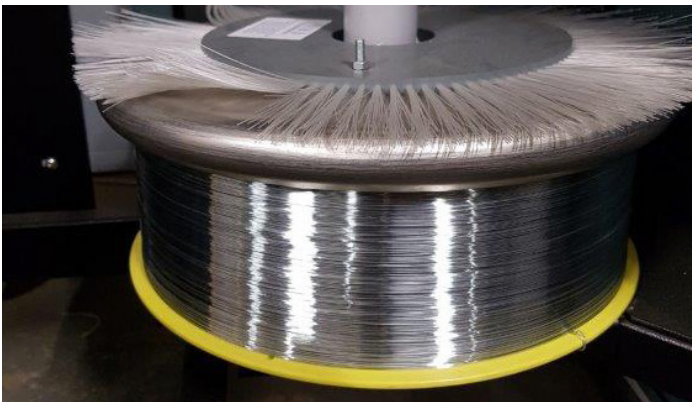
The PowerSquare™ 224 has a single stitch head which inserts one to six stitches in the spine of the book. The stitch head and clincher are static; the sheets move to the stitch, not vice versa. This means the stitch head and clincher never have to be moved, so alignment and stitch quality is consistently good.

Up to six staples can be applied to one set for 2-up or 3-up production. It also features fully automatic settings for different book size and pagination, including variable stitch-leg length for varying book thickness.

Static stitching head and clincher gives **consistent alignment** and **quality**

USER INTERFACE

The PowerSquare™ 224VF has a state-of-the-art control system including remote diagnostics. The intuitive GUI is easy to navigate and sets up all machine functions quickly. The control system includes a detailed service and diagnostic system which can be remotely accessed for preventative maintenance, fault analysis, and system monitoring, leading to greater efficiency and utilization of the machine.



TECHNICAL SPECIFICATIONS

PowerSquare™ 224	
Paper Size	Minimum 4.7" x 7.8" to maximum 14.5" x 20.4"
Stock Range	16lb bond to 148lb bond dependent on paper type and quality
Book Thickness	<ul style="list-style-type: none"> • Minimum set thickness – 1 sheet 16lb (when folded makes a 4-page leaflet) • Maximum finished book thickness – 0.3" (approx 160 pages 21lb bond) • Maximum set thickness – 0.15" (approx 40 sheets 21lb bond)
Stitching	<ul style="list-style-type: none"> • 2 low-impact staple heads with moving clinchers • Auto-adjusting staple pitch according to sheet size, range 4"- 6"
Book Stacker	Stack up to 36.5"
PowerSquare™ 224VF	
Paper Size	Minimum 7.8" x 8.2" to maximum 13.7" x 19.6"
Stock Range	16lb bond to 148lb bond dependent on paper type and quality
Book Thickness	<ul style="list-style-type: none"> • Minimum set thickness – 1 sheet 21lb (when folded makes a 4-page leaflet) • Maximum finished book thickness – 0.4" (approx 208 pages 21lb bond, 224 pages 70gsm) • Maximum set thickness – 0.2" (approx 52 sheets 21lb bond, 56 sheets 70gsm)
Stitching	Single heavy duty stitch head 1 – 6 stitches, evenly spaced on the spine of the book
Stitches/Spool	up to 291,500
Books*/Spool	approx 127,000
No. of Bins	2
Book Stacker	Stack up to 36.5"

*Standard book is made from 20 sheets of 21lb bond paper, with 2 stitches

