// Plockmatic Group

Morgana BM5000 Series Production Booklet Making System



New Product Launch Information

This NPLI is to be used as a reference guide and should not be shared with customers.



Document Details

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Revision history

Date	Comment
2019-11-08	1 st release
2020-03-06	Removed information regarding Short Book transport enhancement as this kit now is a part of the standard configuration
2020-03-06	Added information regarding Possible staple positions using the PBM STITCH version new page 13
2020-03-06	Added image showing max/min supported sheet size page 28
2020-03-06	Added information around max no. of sheets when running with 4 stitch heads
2020-03-20	Added information around rec max and peak volume on page 19
2020-03-24	Added information on staple position when running corner stapled sets on page 14
2020-03-27	Corrected errors in Set Size Guide
2020-04-09	Corrected error regarding system size on page 24
2020-04-09	Updated information regarding power consumption on page 24
2020-04-30	Updated frontpage to new graphical profile

Table of Contents

Executive Summary	4
Product Overview	5
Description of the BM5035 and BM5035s and its options	7
Competition	16
C.P Bourg BM-e	16
Duplo 600i Pro System	16
Booklet Maker Landscape	17
Positioning of Morgana Group Booklet Makers	19
Target Market segments	20
Productivity Tables	22
Configuration and Option Interchangeability	23
System Specifications	26
Booklet Set Size Guide	28
Option Specification	29
Convenience Feeder CF5000	29
CST 3.0 Crease Side Trimmer	30
Consumable Specification	31
BM5000 Staple version	31
BM5000 Stitch version	31
Targeted Reliability	32
Part numbers, Size and Weight	33
Footprint	35
Serial number and Packing label	36

Morgana BM5000 Series

Executive Summary

Intro:

- A4 /Letter size Landscape Booklet
 Maker system
- Available with staple heads or stitch heads
- 50 sheet or 35 sheet version available
- Competitively priced for mid production markets
- Advanced features from the production segment made available for the mid-range

BM5000 Series is a ground-breaking Booklet Making system perfect for larger Centralized reproduction departments, Commercial print providers and Digital Printers with multiple printing systems and Graphic Communications Bureau

Solution:

The digital print customer continues to look for new ways to produce professional-looking documents with shorter run lengths, while maintaining or increasing profitability. In this environment professional, cost-effective inline solutions are a critical success factor. New mid-production to production printing devices now manages a wider than ever range of stocks and media types than ever before. These new media capabilities combined with increased capabilities around duplexing longer sheet sizes drive new demand for robust, professional finishing in the mid production segment.

The new BM5000 series offer features and capabilities perfectly suited for this demanding segment of the market.

Key Features:

- Produce A4 or Letter sized landscape booklets
- Square Fold feature offered as part of the <u>standard</u> configuration
- Face trimming produces a professional finish by removing the shingle-edge caused by folding multiple sheets
- Full bleed trimming is available as an option.



Product Overview

Introduction

The BM5000 Series Production Booklet Maker System is a powerful, flexible booklet making solution for mid-to-large Centralized Reprographic Departments (CRD) and Commercial Print environments. It provides a host of features never before available in this segment and at this price point. It sets a new standard for booklet making in the mid-Production segment.



The BM5050 with the optional CF5000 installed and the CST 3.0 combined with the new VFX vacuum feeder

Key Features:

- Makes A4 or Letter sized full bleed square folded landscape booklets
- Stitch Version available with Stitch heads for heavy production sites.
- Makes professional 200-page (or 140 page) stapled or stitched and Square folded Booklets at or near rated engine speed
- Supports up to 350 gsm (110 lb. cover) media coated or un-coated for a wide variety of applications
- Exclusive features like SquareFold and Bleed trim capabilities.

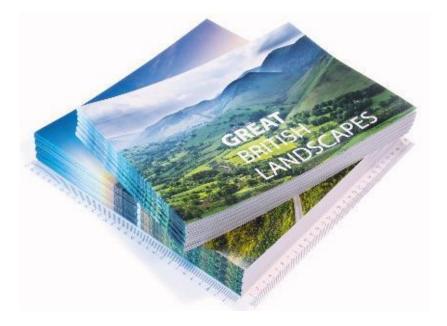
The BM5000 series is designed to meet the demand of the mid-production to production segment. The BM5000 Series meets the demand of the marketplace where productivity (quick turnaround), durability and reliability are key requirements for success. Features such as optimum output quality, wide media support and exclusive functionality like SquareFold, Bleed trim and Landscape booklet capabilities are critical features for success in this competitive segment of the marketplace.

What is new in the BM5000 Series?

The BM5000 Series is a completely redesigned family of Booklet Making systems from Morgana designed to fully take advantage of the new unique opportunity around long sheet capabilities that is becoming more and more common in the marketplace. The system is positioned above the existing BM3000 platform currently available from Morgana and it is designed to handle larger monthly volumes compared to the BM3000 at an average book volume of up to 40k books/month.

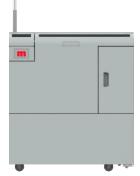
The BM5000 Series is available either with the standard Morgana <u>staple heads</u> or configured with 2 or 4 <u>Stitch heads</u> for more production-oriented sites. The Stitch version is also capable of doing corner and edge stapled sets.

Both Stitch and Staple systems are available as a 35 or a 50-sheet version.



Description of the BM5035 and BM5035s and its options

The Morgana Booklet Maker System consists of a number of modules. Some of them are optional allowing customers to pick only the features they need.

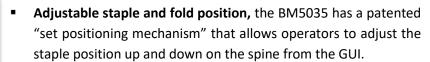


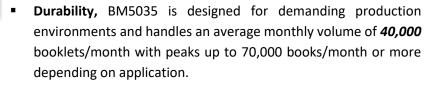
Booklet Maker unit - BM5035

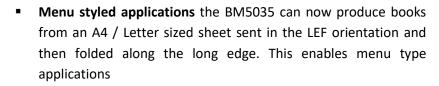


This is the base unit which folds and saddle stitches booklets up to 140 pages (35 sheets). The BM5035 is packed with the latest patented technologies to deliver top quality output even in the most demanding environments. The staple positioning mechanism enables the operator to adjust the staple position, fold position and fold skew compensation on the fly during a run.

- Patented solutions for benchmark booklet quality on all booklet sizes and media types
- Hand feed capability enables users to make booklets in the offline mode from documents produced on other devices in the office
- Heavy duty staple mechanism designed specifically for the production environment. The staple mechanism is maintenance free thanks to a patented solution that eliminates routine staple mechanism service.









Heavy Duty Stapling Mechanism







Booklet Maker – BM5035s



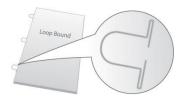
ISP staple head Stitch Wire



A5 landscape books



Corner stapled set



BM5035s - Stitch Version (pn. 13706110)

The BM5035s includes all the mechanical improvement as the BM5035 Staple version with the added feature of Stitch mechanism.

- Durable Stitch Mechanism. For the launch of the BM5035s Morgana Group has partnered up with DeLuxe Stitcher company Inc and incorporated the latest design of the ISP Stitch head with One Touch design (One-Touch M2000), next generation stitch head design optimized for less experienced users. A single lever allows operator to adjust leg length of the staples without any special tools for an attractive and perfect sized staple for every book thickness.
- The Top fed stitch head comes with an added advantage that enables users with the option to run system using any colour nylon coated wire, something that most of the major competing heads cannot do
- Up to 100,000 cycles without operator reloading wire (20X staplers)
- One step wire treading, minimal down time.
- Simple conversion to safety stitch for children's books by installing the safety stitch kit (pn. TBD)
- Variable center to center distances for small and large books.
- Thinner wire than staplers minimizing "blow-out" on fine paper books.
- Optional Four Stitch heads configuration, user has the option to equip their BM5035s with 4-stitch heads. The upgrade is done at install or post install by the local service engineer. 4-stitch heads allow for the popular A5 landscape booklet to be produced in 2up to save on click cost.
- Edge or Corner stapled sets, the BM5035s can also produce both edge stapled sets and corner stapled sets.
- Loop stitch option is available (pn. TBD)



Finishing Module – FM5000 (pn. 13806010)

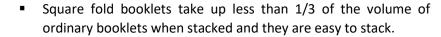
The Finishing Module is a <u>mandatory</u> module. BM5035 or BM5035s cannot operate without this module.

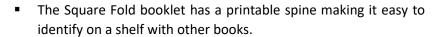
The Finishing Module includes face trimmer and the SquareFold mechanism in one unit. It is based on the successful BM TR module and BM SquareFold module with modifications to handle the longer sheet sizes now supported by the Booklet Maker.

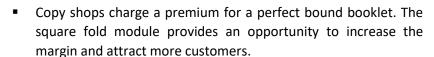


- New improved book stacker, the FM module has a completely redesigned book stacker with increases stack capacity. The new stacker also includes new dynamic stacker full function.
- Improved cutting performance on books made from thin slippery media where existing TR3000 sometimes has limitations













Optional – 50 sheet upgrade kit (pn. 13700002)

50 Sheet Upgrade kit. This kit makes it possible to upgrade a BM5035 to a BM5050 in the field. Upgrade takes less than 30 min. Upgrade fits both staple and stitch version of the BM5035



Optional – 4 stitch head upgrade kit (pn. 13700009)

Add two additional stitch head to the BM5035s for a total of 4 stitch heads. This enables 2-up production of the popular A5 or half letter landscape booklet

NOTE: When running the BM5000s with 4 stitch heads, max number of sheets is reduced to 30 sheets of 80gsm plain paper.



Convenience Feeder unit

Optional - Convenience Feeder CF5000 (pn. 13700007)

The optional Convenience Feeder is more than just a Cover feeder for separately printed covers. The Convenience feeder can be programmed as a single tray self-contained offline booklet making system feeding sheets up to 8000 sheets/h in burst mode for maximum productivity.

The Convenience Feeder is located as an integrated part of the booklet maker unit and can feed covers up to 350gsm (130 lb Cover). Load capacity is approximately 800 sheets (based on 80gsm/20 lb. paper). The cover feeder is powered from the Booklet Maker main unit.

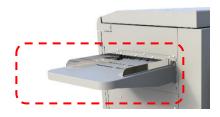
- Air/friction hybrid cover feeding system feeds 140 lb. Index / 250 gsm stock
- Use for pre-printed covers. Handles coated stock.



Optional - High Capacity Book Stacker - BST4000-1

The high capacity belt stacker is a practical option for more production-oriented sites

- Can be configured straight after the BM500 / BM350 or in a 90degree angle, attaches after the standard output tray
- Allows long unattended runs
- Stacks up to 1000 A4 or 8,5 x 11" booklets of 4 pages
- The unit is 440mm (17") Wide and 1770mm (68") long



Optional - Hand Feed Table (pn. 13700008)

This optional kit is only needed when the BM5000 system is installed as an handfed system or if the system majority of the time will be used in hand feed mode.

NOTE: It is <u>always</u> possible to hand feed a BM5000 system even without this option, but this option makes handfeeding easier, if the BM5000 is sold as a handfed system without a VFX this option is recommended.



Optional – CST5000 Crease Trimmer v3 (pn. 12206200)

The optional Crease Bleed Trim unit enables professional looking, full bleed trimmed and creased booklets on the BM5000 system. The CST5000 can be fitted with active anti-static bars that are available as an OPTION to overcome the high static charge that may appear in some environments.



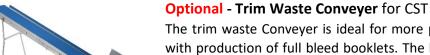
 Supports faster turnaround for booklets by eliminating multiple offline process steps and improves Print for Pay revenue by adding value to finished book



- The Crease function enhances book appearance by reducing or eliminating "cracking" of toner on the spine. It also provides a better fold on thicker stock.
- The Bleed Trimmer trims the sides, or head and foot, sheet by sheet. Full engine speed is maintained to allow for high productivity.



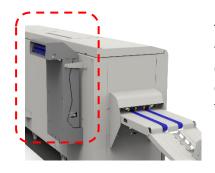




The trim waste Conveyer is ideal for more production-oriented sites with production of full bleed booklets. The belt takes the trim waste from the CST and dumps it in to a larger waste bin (larger waste bin not included). Fits all versions of CST.

Allows long unattended runs





Optional - Waste Transport for FM5000 (pn. 13700006)

This option to the FM5000 module takes the trim waste from the face trimmer and lifts it up so it can be dumped in to a larger waste container or if the CST Trim Waste Conveyor is included in the configuration the trim waste will be dumped on to the belt sending ALL the trim waste (CST and FM module) to the same place.

Allows long unattended runs

This option will be available post launch end of Q3 2020.

Optional - Ultra-sonic DSD kit for the CF5000 (pn. 13700003)

This option adds superior Double Sheet Detection functionality to the Convenience Feeder. The CF5000 comes standard with <u>Optical DSD</u> sensors. One limitation of Optical DSD sensors is that for heavier media (approx. over 250gsm) the DSD functionality cannot be guaranteed. For these cases the Ultra sonic DSD kit enhances the DSD performance.

This option is recommended when the CF5000 will be used primarily as a self-contained feeder and not primarily used just as a Cover Feeder .

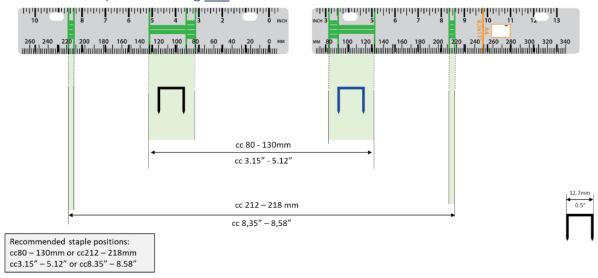


Optional – Loop Stitch kit (pn. TBD)

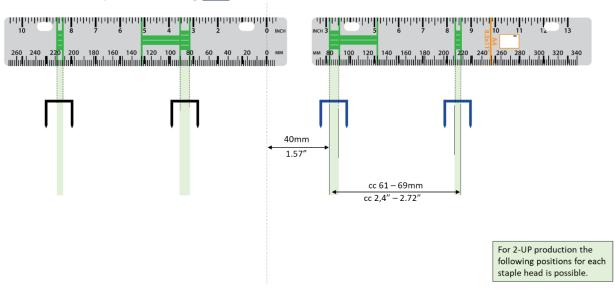
This option enables loop stapled books to be produced

Recommended staple positions using the PBM5000 STITCH version

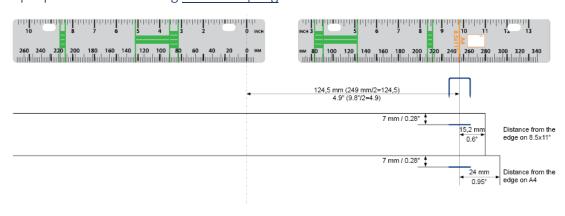
Recommended positions using two heads



Recommended positions using four heads



Staple positions when using corner stapling

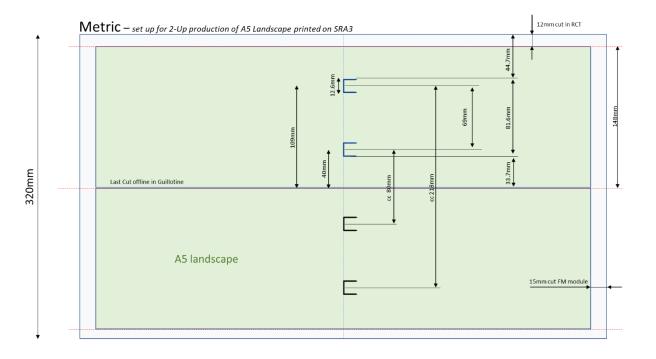


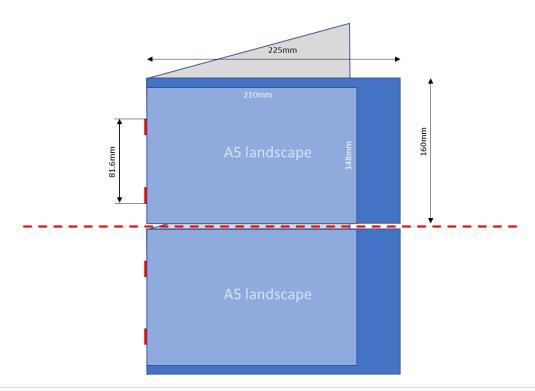
Production of 2-UP applications

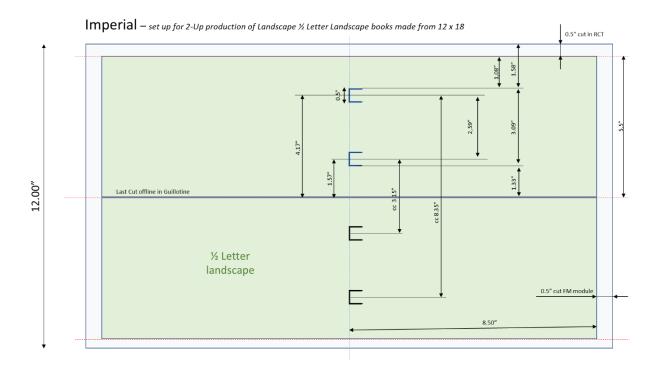
The BM5053s can be equipped with 2 additional Stitch heads (4 heads in total), this enables 2-UP production of some key applications. 2-UP production cuts the click cost for each book in half. The pages for 2 individual books are printed on the same sheet, the BM5035s then puts 4 staples in the set, folds, Square Folds and Face trims the set. The <u>operator</u> then separates the books offline in a Guillotine.

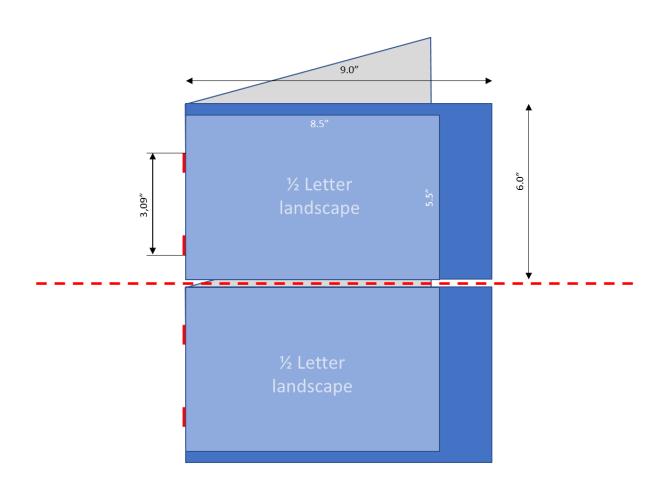


A5 landscape books









Competition

C.P Bourg BM-e

A high-end system designed for heavy production. Suitable for customers with book production of up to 80k books per month. The system can produce landscape books, but the maximum sheet length is only 600mm/23.6". This means that A4 landscape booklets can only have 3mm of face trim. Sheets are bleed



trimmed one at a time before the set is compiled, stapled and folded. Limited to 30 sheets of 75 gsm media.

Advantage BM5000 Series:

- BM5000 Series is priced well below the full BM-e configuration, has a smaller footprint, a larger range of media sizes
- BM5000 Series can handle more sheets, 35 or 50 for the BM5000 vs 30 for the Bourg BMe
- Foot print significantly smaller for BM5000, especially when bleed trim option is included on both configurations

Duplo 600i Pro System

A heavy-duty solution for high production environments. Suitable for customers with book production of up to 70-80k books per month. Uses wire Stitch mechanism to bind the book together. Sheets are bleed trimmed one at a time before the

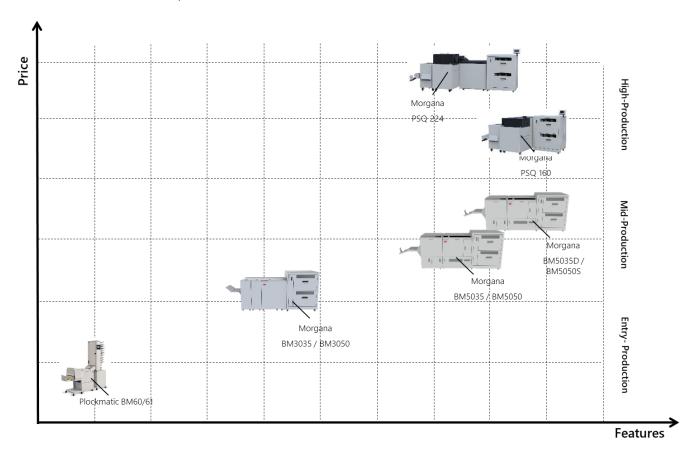


set is compiled, stapled and folded. System can produce landscape books and is limited to 30 sheets of 80 gsm media

Advantage BM5000 Series:

- BM5000 staple version is easier to use and is equipped with heavy duty maintenance free staple heads.
- BM5000 has a cost structure below the 600 configurations, a smaller footprint and optional integrated two knife trimming which is preferred by some customers.
- BM5000 can handle more sheets, 35 or 50 vs 30 for the Duplo 600
- Foot print significantly smaller for BM5000

Booklet Maker Landscape



Booklet Maker Landscape

Manufacturer	Morgana Group	Morgana Group	Morgana Group	Morgana Group	Duplo	Duplo	CP Bourg
Model	BM5000 Series	ВМ3000	PSQ224VF	PSQ160VF	350i	600i	ВМ-е
Number of sheets	50/35	50/35	56	40	20	30	30
Number of staples in each book	2 (Stitch can be equipped with 4))	2	1-6 8 possible	2	2	2-4	2-4
Staple or Stitch	Staple or Stitch	Staple	Stitch	Staple	Stitch	Stitch	Stitch
Possible to adjust staple c-c distance	No for staple version Yes for Stitch version Staple can be adjusted up or down on spine	No Staple can be adjusted up or down on spine	Yes	Yes	Yes	Yes	Yes
Possible to adjust fold position	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Media range	64-350	64-300	60-300	60-400	60-350	60-350	60-350
Largest sheet size	320 x 620 12.6 x 24.4"	320 x 457 12.6 x 18"	350 x 500 14 x 19.7"	350 x 620 14 x 24.4"	320 x 460 12.6" x 18.1 "	350 x 508 or 230 x 610 13.8 x 20" or 9 x 24"	370 x 6 14.56 x 23.″
Smallest sheet size (mm)	Staple: 206 x 210mm 8.1 x 8.27" Stitch: 120x210mm 4.72"x8.27"	206 x 275 8.1 x 10.8"	200 x 210 7.87 x 7.97"	200 x 200 7.87 x 7.97"	105 x 200 4.13 x 7.97"	120 x 170 or 105 x 297 4.72x6.7" or 4.13x11.69"	119 x 18
Face trimmer	integrated	optional	integrated	integrated	optional	optional	optiona
Square fold	integrated	optional	integrated	integrated	optional	optional	optiona
Bleed trim option	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bleed Trim method	Slitters	Slitters	2-knife trimmer	2-knife trimmer	Slitters	Slitters	Slitters
Crease	Yes - Fine or Coarse (optional)	Yes-Fine or Coarse (optional)	No	No	Yes (optional)	Yes (optional)	Yes (option
Rotation	Yes (optional)	Yes (optional)	Yes Standard	Yes Standard	No	No	Yes (option

Positioning of Plockmatic Group Booklet Makers

The Morgana PSQ224, PSQ160 and the Morgana BM3000 complement each other well and allows Morgana dealers and sales reps to tailor a solution to their customer's needs.







PSO	Q224VF		PSQ160VF	BM5000 Series	BM3000 Series
ameter	l N	Aorgana PSO224VF	Morgana PSO160VF	Morgana BM5000	Morgana BM3

Parameter	Morgana PSQ224VF	Morgana PSQ160VF	Morgana BM5000	Morgana BM3000
Feeders	VFX or VF602-500 + UI kit	VFX or VF602-2000 + UI kit	VFX	VFX, VF602-500, AF602-500, ACF510
Max Set Size	56 (70gsm) or 52(80gsm)	40 (80 gsm)	50/35 (80 gsm)	50/35 (80 gsm)
Max set thickness	5.2mm / 0.205"	4mm / 0.157"	5mm / 0.197"	5mm / 0.197"
Min Paper Size	200 x 210mm 7.8"x8.2"	200 x 210mm 7.8"x8.2"	Stitch: 206 x 210mm 8.11x8.27" Staple: 120x210mm 4.72x8.27"	206 x 275mm 8.11x10.83"
Max Paper Size	350 x 500mm 13.7 x 19.6"	350 x 620mm 13.7x24.4"	320 x 620mm 12.6x24.4"	320 x 457mm 12.6x18"
Min Paper Weight	60gsm/coated	60gsm/coated 90gsm	64gsm/coated 104gsm	64gsm/coated 104gsm
Max Paper Weight	300gsm	400gsm	350gsm	350gsm
2-Side trimmer	Yes, P2T trims as the last process step. Side-trimming the finished book gives a clean, sharp and accurate result	Yes, P2T trims as the last process step. Side-trimming the finished book gives a clean, sharp and accurate result	Yes, CST cuts top and bottom of each sheet prior to stapling and folding	Yes, CST cuts top and bottom of each sheet prior to stapling and folding
Crease tool	N/A	N/A	Two creasing tools – fine and coarse	Two creasing tools fine and coarse
Unique features	Up to 6 staples can be applied to one set for 2-up or 3-up production	A4 landscape books 8.5x11" landscape books A6 book (with P2T installed)	A4 /LT landscape books Modular Design A6 books with Stitch version	Modular Design
Staple/Stitch	1 - 6 stitches in each book, Stitches/spool: up to 291,500 Books*/spool: approx. 127,000	2 Staples in each book. Each cartridge contains 5000 staples	2 Staples in each book. Each cartridge contains 5000 staples Or 2 -4 Stitches	2 Staples in each book. Each cartridge contains 5000 stapl
Average monthly volume and peak volume	Average: 70k Peak: 110k	Average: 50k Peak 80k	Average: 40k Peak 70k	Average: 30k Peak: 50k

Target Market segments

Every customer requirement is of course unique. Below is a general table indicating what technology to offer to different vertical market segments. The categorization is mainly done based on two key criteria.

- Monthly booklet Volume
- Requirement for Books made from longer/larger sheet sizes

Market	Data Centric	Public Sector	Corporate	Comn	nercial
Average monthly Booklet volume	Banking, Insurance Reports, Statements, Policies	Government, Education / Schools Reports, Education Material	CRD / Print Rooms Reports, Marketing collaterals, Manuals, Engineering Support, Catalogues	Quick Printers Reports, Marketing collaterals, Manuals, Booklets, Catalogues Photobooks	Commercial Printer Reports, Marketing collaterals, Manuals, Booklets, Catalogues, Photobooks
100 k 80 k	PSQ224VF	PSQ224VF	PSQ160VF	_TTE	PŠQ160VF
60 k	BM3050/35	SM3050/35	BM5050/35	8M5050/35 BM3050/35	BM5050/35
5 k	BM5050/35	BM5050/35			

Banking, Insurance

In this segment the ability to fulfil all the organization's need will be key for success. Most of the common applications in this vertical market are made from standard sheet sizes, longer sheets and larger sheet sizes will be less common.

The BM3000 and PSQ224 will be a perfect fit for this customer group depending on production volume.

In this segment specifically the 50-sheet capability can be used to differentiate the Morgana offer. When up against the competition on government tenders etc. the ability to produce 200-page booklets can be used as an important differentiator.

Government, Education / Schools

Also, in this segment the ability to fulfil all the organization's application requirements will be key to success. Most of the common applications in this market are made from standard sheet sizes, longer sheets and larger sheet sizes will be less common. The BM3000 and PSQ224 will be a perfect fit for this customer group.

In this segment specifically the 50-sheet capability can be used to differentiate the Morgana offer. When up against the competition on government tenders etc. the ability to produce 200-page booklets combined can be used as an important differentiator.

Print Rooms / CRD

Print rooms/CRDs (Centralized Reprographic Department) is a key target market for Morgana Group production Booklet Making systems. This sector is expected to see significant growth in coming years as organizations seek to eliminate waste and reduce their printing expenditure by moving from outsourced mass production to in-plant print-on-demand.

If the transition from outsourcing to in-house is to be successful, it is important that the finishing equipment manages all the needs of the organization and that it is easy to use as operators are often not dedicated to one device.

As many print rooms also produce sales collaterals and marketing materials this sector has shown big interest for the new longer sheet size applications such as landscape books. Many Print rooms and CRDs already include some sort of inline booklet making devices to different from these offerings the PSQ160 and the BM5000 family provides a perfect mix of user friendliness and feature rich spec.

Quick Printers

The Print-for-Pay (PFP) or Quick Print market is another key target market segment for Morgana Group Booklet Maker offerings.

Here, customers are increasingly looking for high quality, short run B/W or color output finished in a professional way. Production volumes are generally lower at these locations so the PSQ range could generally be a bit too durable for this segment. Depending on customer base the BM3000 or the BM5000 is generally a perfect fit for this customer base.

Here, the Square fold feature adds extra revenue to the print provider enhancing the value proposition. The 50-sheet capability of the BM5000 and BM3000 allows PFP customers to say "yes" to more of the jobs that come through the door.

Commercial Printers

The continued demand for shorter and shorter run lengths and faster turnaround times has led traditional commercial printers to produce more of their output on digital printing devices.

Commercial printers, used to offset quality, expect digital presses to produce print of a similar look and feel to offset and handle the same coated media they run through their offset presses. These customers are generally very demanding and operate on small margins. They require feature rich cost-efficient finishing devices. A PSQ160 or a BM5000 is generally a good fit for this segment.

In this segment features like bleed trim, crease and square fold will be mandatory to be successful.

Productivity Tables

BM5000 connected to VFX

BM5035, BM5050, BM5035s, BM5050s Books Per Hour					
Sheets per Book	A4	A3			
2					
5					
10					
15					
20					
25					
30					
35					
40					

Configuration and Option Interchangeability

Handfeed Configurations

The following configuration options are available.



BM5035 staple or stitch

Entry level handfeed version of the BM5035 and BM5035 s. The optional HANDFEED TRAY is recommended for standalone handfeed systems



BM5035 staple or stitch with the CF5000

Entry level handfeed version of the BM5035 and BM5035 s. The optional HANDFEED TRAY is recommended for standalone handfeed systems. Here combined with the optional CF5000 that can function in two main operation modes:

- 1. Run as a self-contained one tray feeder system for short run jobs. The CF5000 runs at rated feeder speed in feeder mode feeding sheets at up to 9000sheets/h in burst mode for optimum productivity. CF5000 can hold up to 800 sheets of 80 gsm media.
- 2. Add pre-printed covers from the CF5000 to the book blocks that gets hand fed trough the HANDFED TRAY slot or through the top cover handfeed slot

Feeder Options

VFX

At launch the BM5000 series has one high capacity feeder option. That is the VFX vacuum feeder from Morgana.

It is not possible to combine the BM5000 Series with the ACF510 or the AF602.



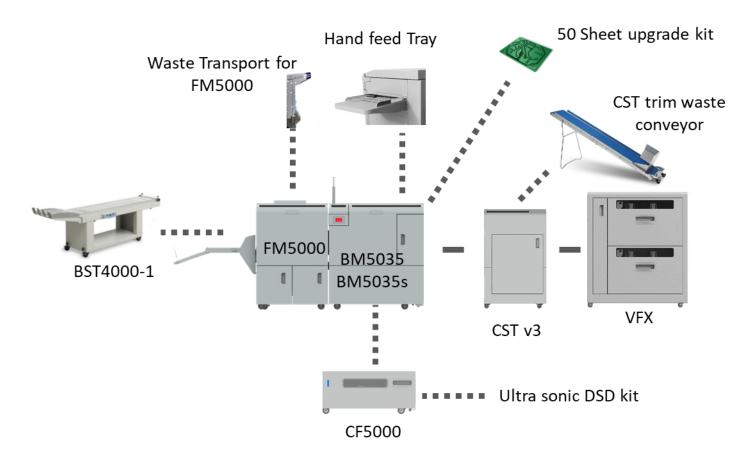
CF5000

The CF5000 can be added to a configuration with a VFX working as a third pick point. Users can load both trays in the VFX with content sheets and then load the covers in the CF5000

Or the CF can be used as a super cost efficient one tray integrated "mini feeder" feeding the complete pre collated set to the BM.



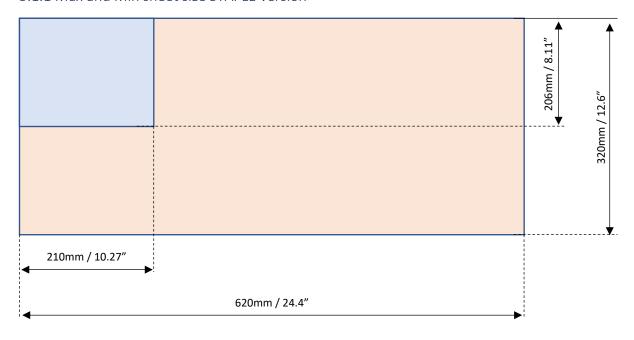
Configuration Map



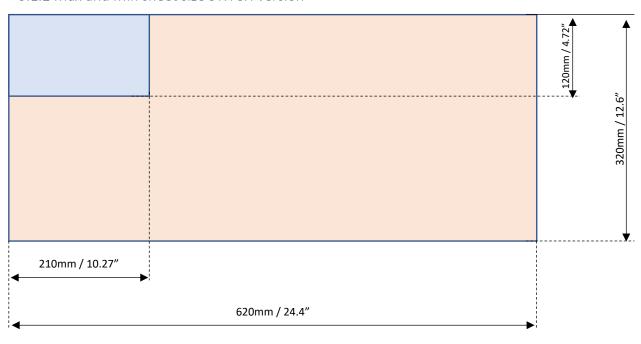
System Specifications

Feature	Specifications	Remarks
Speed (Online usage)	Maintain engine speed while set is collated (actual depends of engine speed).	Actual speed in number of booklets (per min / hour) depends on number of sheets per booklet.
Standard Paper Sizes	A4, A3, B4, 8.5x11", 8.5x14", 11x17, 12x18", SRA3, SRA4, 9 x 12"	Custom sizes are available
Paper Size (Minimum)	Width 206 mm / 8.1"	
Staple Version	Length 210 mm / 8.3"	
Paper Size (Minimum)	Width 120 mm / 4.72"	
Stitch Version	Length 210 mm / 8.3"	
Paper Size (Maximum)	Width 320 mm / 12.6"	
Staple and Stitch version	Length 620 mm / 24.4"	
Danar Waight (Minimum)	64gsm / 16 lb. Bond uncoated	
Paper Weight (Minimum)	105gsm / 28 lb. Bond Coated	
Paper Weight (Maximum)	300gsm / 110 lb Cover (350egsm*)	*)350e gsm supported on some media. Additional testing by the media at hand is required before any guarantees can be given. 350egsm is supported through the interface.
Max set thickness, staple and fold	50 or 35 Sheets (80 gsm / 20 lb. Bond, equivalent)	Stapled and folded
Max set thickness, edge and corner staple	30 sheets (80 gsm / 20 lb. Bond, equivalent)	
Max set thickness, Fold only	1 – 2 Sheets	Non Stapled and folded. More than 2 sheets folded but not stapled is not recommended and needs to be tested with specific image and media before functionality can be guaranteed.
Dimensions (L x H x D)	2660mm x 1000m x 760mm / 104.7" x 35.4" x 29.9"	Incl. Stacker but not including CST See page 36 for full details
Power Source	100-240V, 50-60Hz, 4-2A	+6% -10%,
Power consumption	250 - 300W, idle 400W, peak	Continuous Operations
Noise emission	62 dB	Complete system
Minimum trimming	1 mm / (0.0394")	Adjustable in 0.1 mm steps
Maximum trimming	16 mm / (0.63") For longer trimming system will go in to "multi cut mode" trimming several times	Adjustable in 0.1 mm steps. Multi cut down to 105mm long book is supported in some media. Testing required before any guarantees can be given.
Input / Output Sheets	35 or 50	

5.1.1 Max and Min sheet size STAPLE version



5.1.2 Max and Min sheet size STITCH version



Booklet Set Size Guide

The following tables are guidelines designed to give an indication on how many sheets a specific application can have for a given media weight. Exact number of sheets is depending on specific media type and image.

Note that for some "dense" coated media the sheet count may be reduced.

BM5050/BM5050s

BM5035/BM5035s

	Paper	weight	
Bond	Cover	Index	Gsm
20	28	42	80
24	33	50	90
31	45	66	120
36	50	75	140
53	74	110	200
58	80	120	220
76	105	158	280
82	114	170	300
			350

Paper Size Longer than 457mm/18" Area Coverage Low Full			
50/35	32		
45/35	32		
25	24		
19	17		
15	14		
13	12		
12	10		
9	9		
	2		

Paper Size				
A3 (11x1		A4 (8.5x1		
Area Coverage		Are Cover	_	
Low	Full	Low	Full	
50	32	50	33	
45	31	45	32	
25	23	26	25	
20	17	22	20	
15	14	16	15	
14	13	15	13	
12	10	12	10	
9	8	9	8	
2	2	2	2	

Paper Size				
A3 (11x1		A4 8,5x		
Are Cover		Are Cove		
Low	Full	Low	Full	
35	30	35	30	
32	29	32	29	
22	19	22	19	
19	15	20	15	
13	10	13	10	
12	9	11	9	
10	7	10	7	
8	6	8	6	
2	2	2	2	

Edge and corner staple set size guide

Paper weight					
Bond	Offset	Cover	Index	Gsm	
20	50	28	46	42	80
24	60	33	56	50	90
31	81	45	73	66	120
36	90	50	82	75	140
53	135	74	122	110	200
58	146	80	134	120	220
76	192	105	175	158	280
82	208	114	189	170	300
					350*

A4 or 8.5x11" Area Coverage				
Low	Full			
30	25			
25	25			
25	25			
20	20			
15	15			
14	12			
10	10			
9	9			
5	5			

Option Specification

Convenience Feeder CF5000

Feature Specifications		Remarks
Speed	8000 sheets/h	
Standard Paper Sizes	Same as BM	
Paper Weight (Minimum)	80 gsm plain paper / 105gsm coated	
Paper Weight (Maximum) 300gsm*		350gsm supported with limitations
Load Capcity	80 mm (approx. 800 sheets of 80 gsm paper) 3.15" (approx. 800 sheets 20 lb. Bond paper)	
Off-line Use Possible to use CF5000 as a self-contained offline feeder		(Together with Booklet maker)
Dimensions (L x H x D) The CF5000 dimensions are included in the Booklet maker dimensions and will not add anything more to the space.		See page 36 for full details
Power Source	From BM	

CST 3.0 Crease Side Trimmer

	Specifications	Remarks
Speed	Same as BM5000 Series	
Standard Paper Sizes	Same as BM5000 Series	Custom sizes are available
Paper Weight (Minimum)	Same as BM5000 Series	
Paper Weight (Maximum)	Same as BM5000 Series	
Off-line Use	Not Possible	
Dimensions (L x H x D)	700 x 1000 x 760 mm / 14.2 x 35.4 x 29.9"	See page 36 for full details
Max side trim	30mm / 1.18" from top and bottom of each sheet (60mm total, 30mm +30mm)	
Min trim	5mm / 0.20" from top and bottom of each sheet. Bypass possible	
Power Source	100-240V 50-60Hz, 4-2A	+6% -10%,
Power consumption	300W, idle 400W, peak	Continuous Operations

Consumable Specification

BM5000 Staple version

Staple Cartridge: 5000 Staples / Cartridge. Each cartridge box contains 3 cartridges in each box. (Required 2 staple cartridges per machine)

Same staple cartridge as for the BM3000 and the PSQ160



Interchangeability

This staple cartridge is unique for Morgana BM3000, BM350, PSQ160 and Morgana BM500e, BM350e, BM500, BM350, BK5030 Production Booklet Maker and is not interchangeable with any other finishers. Using different staple cartridge will result in reduced penetration performance on coated media.

BM5000 Stitch version

Wire spool is used for the stitch version (PBM5035s or PBM5050s). Each spool contains approx 50k staples depending on book thickness.



Targeted Reliability

Feature		
Preventive Maintenance Interval	125 K Booklets	
EM ratio (Emergancy Maintenence)	1 / 83000 Booklet	
MTTR (Mean Time To Repair)	1 Hour or less	For EM
Jam rate	1 / 600 Booklet or less	Incl. Paper and staple jams.
Installation Time	1 day	Incl testing
Monthly recommended average volume	40k books/month	
Monthly recommended peak volume	70k books/month	
Life of system	2.4M Books	

Part numbers, Size and Weight

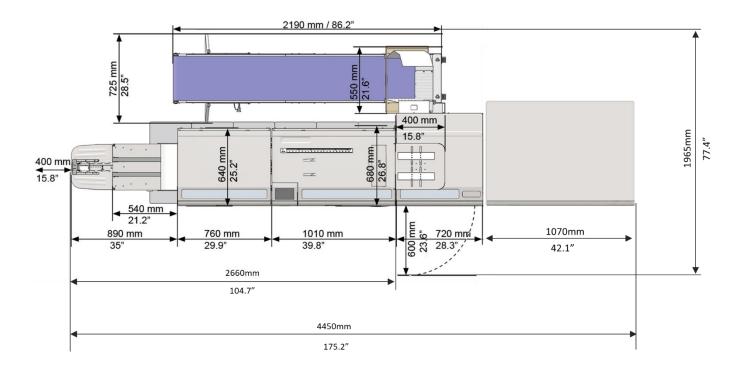
Product		BM5035 staple version	BM5035 S stitch version	FM 5000 Module	CF 5000	RCT 3.0
Model Name		BM5035	BM5035s	FM5000	CF5000	RCT 3.0
Product	ion site	Taiwan	Taiwan	Taiwan	Latvia	Latvia
Plockmatic	Part No.	13706010	13706110	13806010	13700007	12206200
\\/a:= at	Net	190kg / 418lb	190kg / 418lb	150kg / 330lb	100kg /220lb	210 / 462lb
Weight	Gross	220kg /485lb	220kg /485lb	175kg / 385lb	120kg / 264lb	260 / 573lb
Packing Method		ctn	ctn	ctn	ctn	ctn
		1200mm / 47.2"	1200mm / 47.2"	1200mm / 47.2"	1200mm / 47.2"	1200mm / 47.2"
Packing D (LxH		800mm / 31.5"	800mm / 31.5"	800mm / 31.5"	760mm / 29.9"	700mm / 27.6"
		1560mm / 61.4"	1560mm / 61.4"	1430mm / 56.3"	800mm / 31.5"	800mm / 31.5"
Number of units/CTN		1	1	1	1	1
Maximum Stack	Storage	3	3	3	3	3
High	Transport	3	3	3	3	3

Product		Ultra-sonic DSD kit	Waste Transport for FM5000	Hand Feed Tray	BM5050 upgrade kit
Model Name		Ultra-sonic DSD kit	Waste Transport for FM5000	Hand Feed Tray	50 sheet upgrade kit
Productio	n site	Latvia	Latvia	Latvia	Latvia
Morgana P	art No.	13700003	13700006	13700008	13700014
\\/aiaht	Net	5 / 11lb	tbd	10 / 22lb	5 / 11lb
Weight	Gross	10 / 22lb	tbd	15 /33lb	10 / 22lb
Packing M	Packing Method		ctn	ctn	ctn
Packing Dimension (LxHxD)		380mm / 15"	tbd	650mm / 25.6"	390mm / 15.4"
				500mm / 19.7"	165mm / 6.5"
		50mm / 2"	tbd	180mm / 7.1"	165mm / 6.5"
Number of units/CTN		1	1	1	1
Maximum	Storage	n/a	3	n/a	n/a
Stack High	Transport	n/a	3	n/a	n/a

^{* 3} Cartridges in one carton

Prod	uct	4 Stitch head upgrade	Loop Stitch kit
Model Name		4 Stitch head upgrade	Loop Stitch kit
Producti	on site	Latvia	Latvia
Morgana	Part No.	13700009	TBD
\\/aiabt	Net	5 / 11lb	tbd
Weight	Gross	10 / 22lb	tbd
Packing Method		ctn	ctn
		380mm / 15"	tbd
Packing Dimension (LxHxD)		155mm / 6.1"	tbd
		50mm / 2"	tbd
Number of units/CTN		1	1
Maximum	Storage	n/a	n/a
Stack High	Transport	n/a	n/a

Footprint



Full configuration requires 4 power sockets

- BM + FM 1 power socket
- CST 3.0 1 power socket
- VFX 1 power socket
- BST4000 1 power socket

Serial number and Packing label

(L = factory location, 102 = product family, D = generation, xxxxx = serial number) BM5035......L137Cxxxxx

Example of machine label:



Example of packing label:



Type: F137-002 Serial: L137C00001

50-60 Hz **(C)**

100-240 V ac 4-2 A

