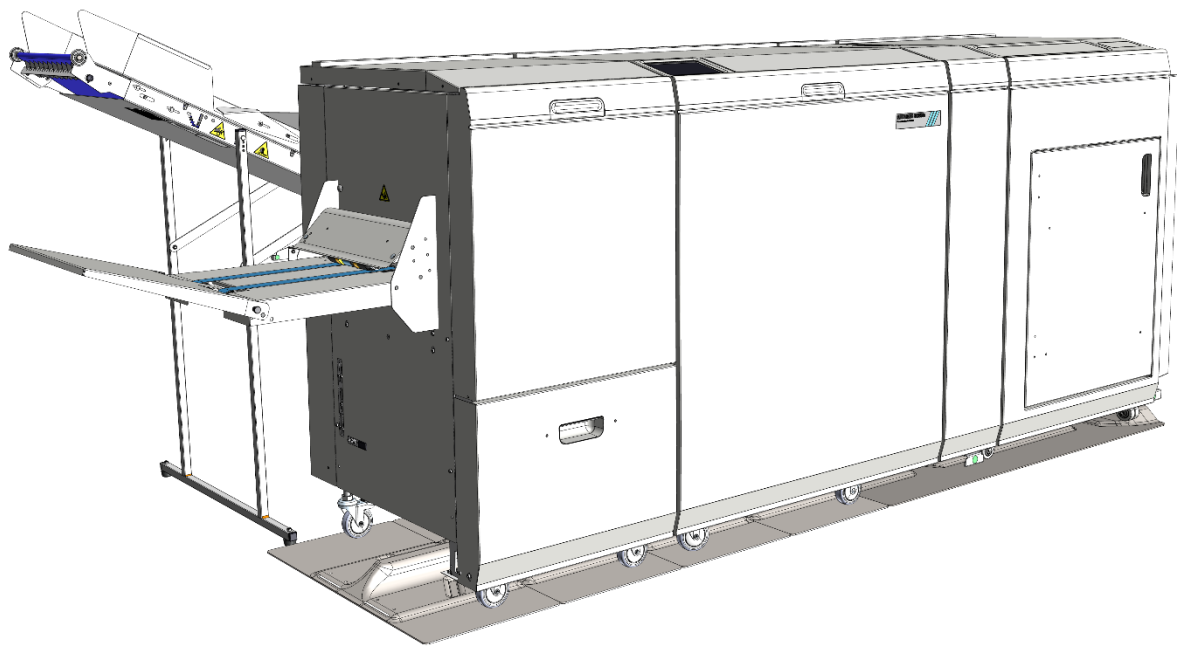


Customer Expectations Guide

BLM450e/435e System – Canon



This CEG is intended as an aid in the discussions with customers prior to signing order and prior to planning the installation to set the correct expectations.

Introduction

The Plockmatic BLM450e or BLM435e Production Booklet Maker System consists of:

- Rotate Crease Trim Module 3.0 (optional), also referred to as the RCT Module
- Hand Feed Bridge Unit (optional), also referred to as the HFBU
- BLM435e/450e Booklet Maker, also referred to as the Booklet Maker, BM or BLM435e/450e
- Finishing Module (optional), also referred to as the Finishing Module or FM400e
- Trim Waste Conveyor (optional), also referred to as the TWC
- BST4000-1 Belt Stacker Module (optional), also referred to as the BST Module
- VFX High-Capacity Vacuum Feeder (optional, only offline – not available in EMEA region)

Together they form a system that allows full bleed booklet making inline with sheets coming from the Printer or offline with sheets coming from the VFX Feeder*.

The performance upgrade kit increases the overall processing speed of the system, and it raises the capacity of the BLM435e Booklet maker from 35 sheets to 50 sheets of 80gsm plain paper. The 50-sheet upgrade kit version requires an FM400e Finishing Module.

The RCT Module can rotate small(er) sheets from long edge feed to short edge feed to maintain high printer productivity. To avoid toner cracking at the spine when folded, the RCT can be programmed to crease the cover sheet. The RCT can also trim the long sides (head and foot) of the booklet sheets to deliver booklets in the desired size. Together with the Face Trimmer in the Finishing Module, the RCT enables production of full bleed saddle stapled booklets. The optional RCT requires an FM400e Finishing Module.

*VFX and its options are only available in US market

About this Guide

This Expectations Guide is developed for the Canon Analyst and the Coordinating Customer Sales resource as a tool in the discussions with customer to clearly explain any mechanical limitations and general specifications of the configuration and outline specific pre-installation tasks that needs to be completed prior to installation.

Table of Contents

Introduction.....	2
About this Guide.....	2
Product Overview	4
Performance Specifications	4
General Specifications	4
Specifications, Finishing Module	5
Specifications, RCT 3.0.....	5
Specifications, VFX (offline configuration only)*	6
Booklet Set Size Guide	7
Saddle Stapling specifications.....	8
Corner and Edge Staple specifications*	8
Install Planning	10
Device Configurations.....	10
System Dependencies and Prerequisites.....	11
Compatible Presses	12
Upstream Canon Interface	13
Dimensions and weights.....	14
Footprint.....	14
Weight and Size	15
North America	17
Europe	17
Environmental Requirements.....	18
Estimated Installation Time	18
Operating Supplies.....	18
Interchangeability	18
Limitations	19

Product Overview

Performance Specifications

General Specifications

Feature		Specifications	Remarks
Speed (Online usage)		Maintains engine speed while collating duplex printed sheets (actual depends on engine speed).	Speed in terms of booklets per hour depends on number of sheets per booklet and on whether the optional performance kit is installed or not.
Standard Paper Sizes	Booklet making	A5, JIS B4, A4SEF, A4LEF, SRA4SEF, SRA4LEF, A3, SRA3, 210x610, 225x610, 210x620, 225x620, 320x620, 210x660, 225x660, 6x9", 8.5x11"SEF, 8.5x11"LEF, 9x12"S, 9x12"LEF, 11x17", 12x18", 8.5x24", 9x24", 8.5x25", 9x25", 8.5x26", 9x25"	SEF= Short Edge Feed LEF= Long Edge Feed
	Edge Stapling*	A4SEF, A4LEF, 8.5x11SEF, 8.5x11LEF	SEF= Short Edge Feed LEF= Long Edge Feed
	Corner Stapling*	A4LEF, 8.5x11LEF	SEF= Short Edge Feed LEF= Long Edge Feed
Custom Paper Size Booklet making	Paper Size (Minimum)	Width 145 mm* / 5.7"* Length 210 mm / 8.27"	*Note: Minimum paper width after bleed trimming in RCT is 148mm or 5.83"
	Paper Size (Maximum)	Width 320 mm / 12.6"* ¹ Length 660.4 mm* / 26"* ²	* ¹ Note: Up to 330mm/13" width possible if RCT bleed trims down sheets to 320mm/12.6" * ² Note: Maximum paper length if configuration includes RCT module is 620mm/24"
Custom Paper Size Edge Stapling*	Paper Size (Minimum)	Width 210 mm / 8.27" Length 210 mm / 8.27"	
	Paper Size (Maximum)	Width 297 mm / 11.6" Length 297 mm / 11.6"	
Custom Paper Size Corner Stapling*	Paper Size (Minimum)	See standard paper sizes	
	Paper Size (Maximum)	See standard paper sizes	
Output size Booklets	Min. Size	145x99mm / 5.7x3.9"	With maximum face trim
	Max. Size	320x330mm / 12.6x13"	With no face trim and without bleed trim.
Output Size Edge Stapling*	Sizes	A4 or 8.5x11" Portrait orientation A4 or 8.5x11" Landscape orientation	Bleed or face trim not available in this mode
Output Size Corner Stapling*	Sizes	A4 or 8.5x11" Portrait orientation	Bleed or face trim not available in this mode
Paper Weight Booklet making	Paper Weight (Min)	64gsm / 16 lb. Bond uncoated (60gsm*) 100gsm / 28 lb. Bond Coated	*60gsm/16lb Bond supported for some media. Testing and verification on specific customer paper required.
	Paper Weight (Max)	300gsm / 110 lb Cover (350gsm*)	*350 gsm supported on some media.
Paper Weight Edge Stapling*	Paper Weight (Min)	80gsm / 20 lb. Bond	Plain paper only
	Paper Weight (Max)	120gsm / 32 lb. Bond	Plain paper only
Paper Weight Corner Stapling*	Paper Weight	80gsm / 20 lb. Bond	Plain paper only
Input / Output Sheets		1 – 50 Sheets (80 gsm / 20 lb. Bond, equivalent), for BLM450e 1 – 35 Sheets (80 gsm / 20 lb. Bond, equivalent), for BLM435e	Stapled and folded
Input / Output Sheets		1 – 2 Sheets	Non-stapled and folded.
Offline Use		Possible. BLM435e/BLM450e can be hand fed	
Dimensions (L x D x H)		1635 x 685 x 1130mm / 64.4" x 29" x 44.5"	Incl. Output Stacker
Power Source		100-240 V; 50-60Hz; 4-2A; AC	+ - 10%
Power consumption (Standby)		100W	
Power consumption (Max)		400W	Includes FM400e module, during production
Noise emission		65 dB	Complete system
Gross Weight		241 kg / 532 lbs	

*Corner and Edge stapling not available in US Market.

Specifications, Finishing Module

Feature	Specifications	Remarks
Standard Paper Sizes	Same as BLM450e / BLM435e	Custom sizes are available
Default trim length	Depends on set thickness	Adjustable in 0.1 mm steps
Minimum trimming	2 mm / (0.079")	Adjustable in 0.1 mm steps For booklets made of sheets equal to or longer than 654mm/25.75", when face trimming, maximum finished booklet size is limited to 325mm/12.8".
Maximum trimming	231mm / 9.09"	Adjustable in 0.1 mm steps.
Paper Weight (Minimum)	Same as BM	
Paper Weight (Maximum)	Same as BM	
Input / Output Sheets	35 or 50	
Off-line Use	Possible	(Together with Booklet maker)
Power Source	From Booklet Maker	
Gross Weight	175 kg / 386 lb.	Including packaging

Specifications, RCT 3.0

Feature	Specifications	Remarks
Speed	Same as BLM450e/BLM435e	Trimming or creasing does not affect productivity
Standard Paper Sizes	A5, JIS B4, A4S, A4L, SRA4S, SRA4L, A3, SRA3, 210x620, 225x620, 320x620 6x9", 8.5x11"S, 8.5x11"L, 9x12"S, 9x12"L, 11x17", 12x18", 8.5x24", 9x24"	Custom sizes available. Smallest paper size RCT can cut down to is 148mm or 5.83". Maximum paper length if configuration includes RCT module is 620mm / 24"
Off-line Use	Not Possible	
Max side trim	30mm / 1.18"	Trimmed from top and bottom of each sheet. (60mm total = 30mm + 30mm)
Min trim	5mm / 0.20"	Trimmed 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

Specifications, VFX (offline configuration only)*

	Specifications	Remarks
Speed	15k sheets/h	
Standard Paper Sizes	Same as BLM450e/435e	Custom sizes are available
Paper Weight (Minimum)	Same as BLM450e/435e	
Paper Weight (Maximum)	Same as BLM450e/435e	
Dimensions (L x H x D)	1070mm x 1250mm x 730mm / 42.1" x 49.2" x 28.7"	
Load capacity	Up to 5400 sheets	80gsm plain paper, 2700 per tray
Double feed detection	Optical and ultrasonic sensors in each tray	
Power Source	100-240V 50-60Hz, 4-2A	+6% -10%,
Power consumption	650W, peak	

*VFX and its options are only available in US market

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. The exact number of sheets depends on media type and image.

Area coverage refers to the printed area on a sheet. For example, full area coverage indicates that the entire page is covered with toner. Note that for some “dense” media, sheet count may be reduced.

BLM450e

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

Paper Size			
A3 or 11x17"		A4 or 8.5x11"	
Area Coverage			
Low	Full	Low	Full
50	32	50	32
45	32	44	32
25	24	26	25
20	17	22	20
15	14	15	15
13	12	14	12
12	10	10	10
9	9	9	9

Paper Size Longer than 457mm/ 18"	Paper Size up to 250mm/9.8" in process direction		
Area Coverage			
Low	Full	Low	Full
50	32	45	28
45	32	39	28
25	24	23	22
19	17	19	18
15	14	13	13
13	12	12	10
12	10	9	9
9	9	8	8

A4 or 8,5x11"	
Finish type	
Corner*	Edge*
50	50
N/A	28
N/A	22
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

BLM435e

Paper weight				Paper Size				Paper Size Longer than 457mm/ 18"	Paper Size up to 250mm/9.8" in process direction	A4 or 8,5x11"			
Bond	Cover	Index	Gsm	A3 or 11x17"		A4 or 8,5x11"				Finish type			
				Area Coverage				Area Coverage					
				Low	Full	Low	Full	Low	Full	Low	Full	Corner*	Edge*
20	28	42	80	35	32	35	32	35	32	35	28	35	35
24	33	50	90	35	32	35	32	35	32	35	28	N/A	28
31	45	66	120	25	24	26	25	25	24	23	22	N/A	22
36	50	75	140	20	17	22	20	19	17	19	18	N/A	N/A
53	74	110	200	15	14	15	15	15	14	13	13	N/A	N/A
58	80	120	220	13	12	14	12	13	12	12	10	N/A	N/A
76	105	158	280	11	10	10	10	12	10	9	9	N/A	N/A
82	114	170	300	9	9	9	9	9	9	8	8	N/A	N/A

Set sizes in grey cells are outside of the recommended range of gsm for these paper sizes.

When producing booklets whose final width is 125mm or less, it is recommended to use sheets longer than 250mm in process direction and to trim the finished booklet down to the desired width. Should it be not possible to use sheets longer than 250mm in process direction, it is recommended to follow these guidelines:

- Minimum media weight: 110gsm, Maximum media weight: 180gsm
- Minimum number of sheets in set: 4, Maximum number of sheets in set: 30

Running a job outside of these guidelines may lead to an increased jam rate, uneven squareback or inaccurate face trimming on the finished booklets.

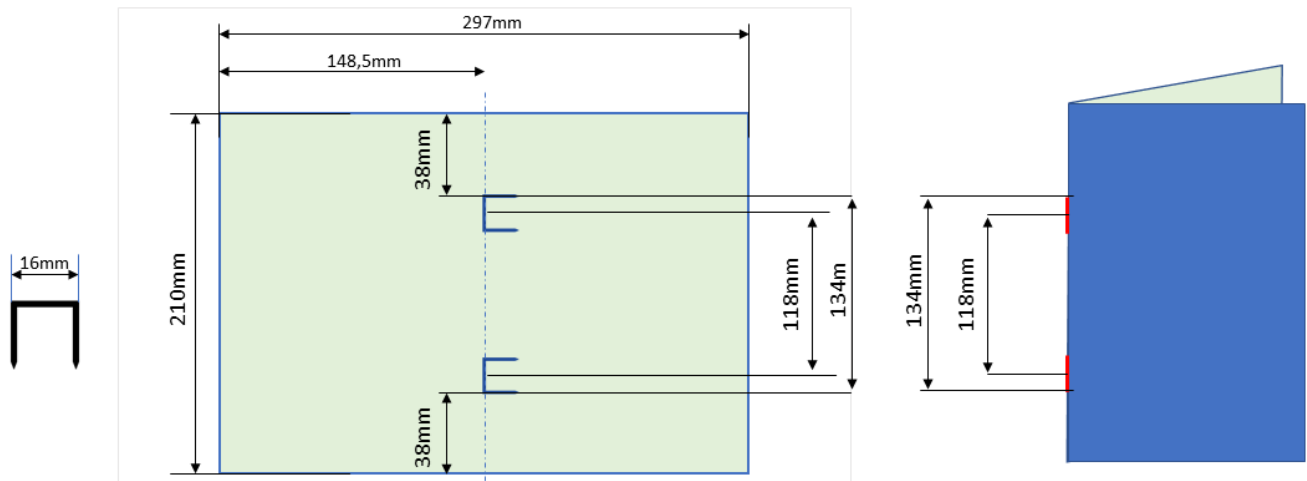
*Corner and Edge stapling not available in US Market.

Saddle Stapling specifications

Metric example

The pictures below show the staples position on a A4 set of sheets. Pictures are not to scale.

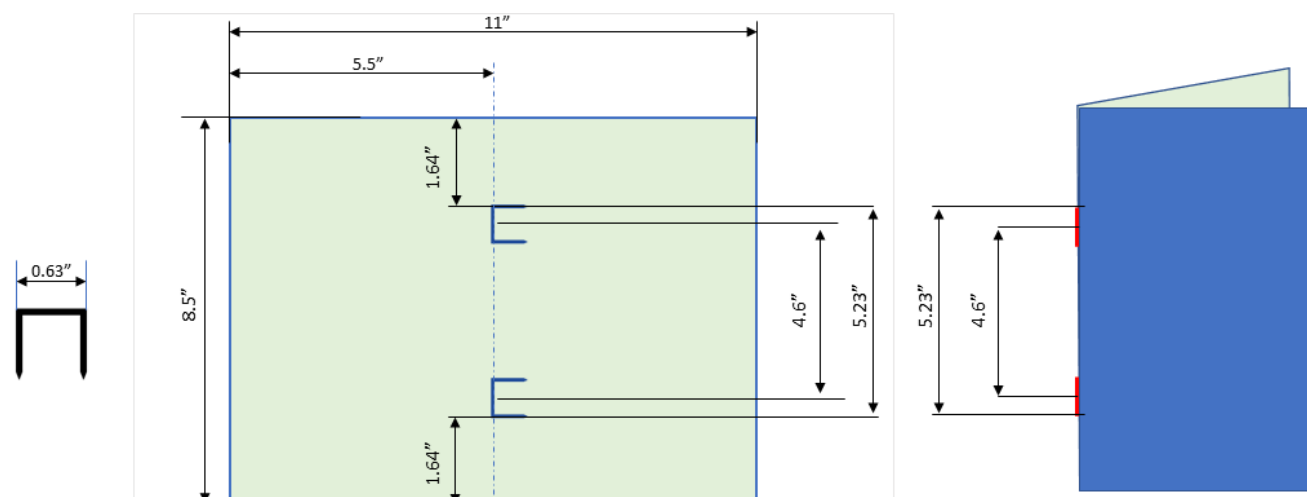
Note! The staple center to center distance of 118mm is fixed for any sheet size and cannot be modified.



Imperial example

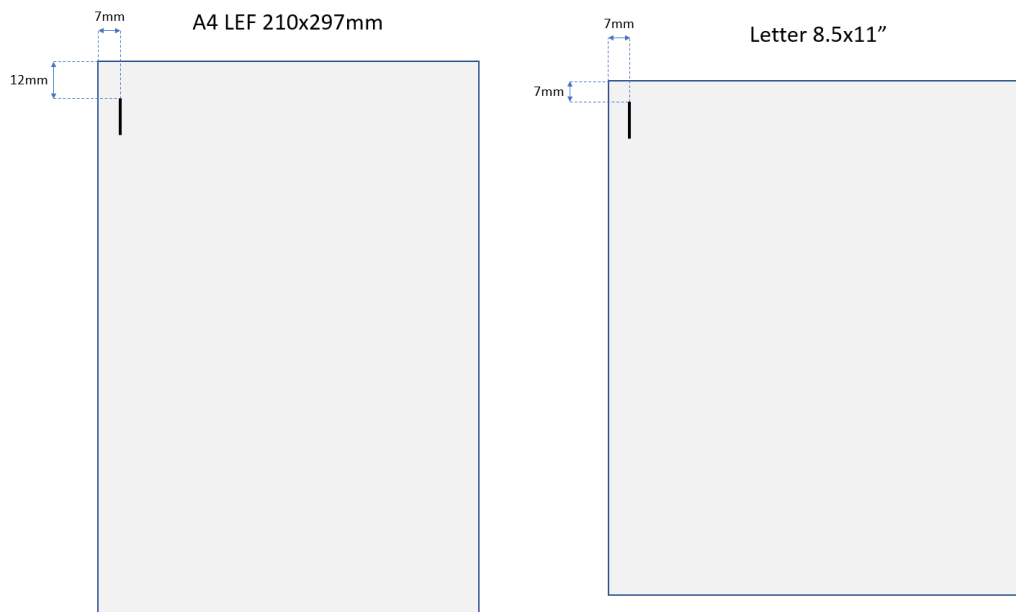
The pictures below show the staples position on a letter sized (8.5x11") set of sheets. Pictures are not to scale.

Note! The staple center to center distance of 4.6" is fixed for any sheet size and cannot be modified.



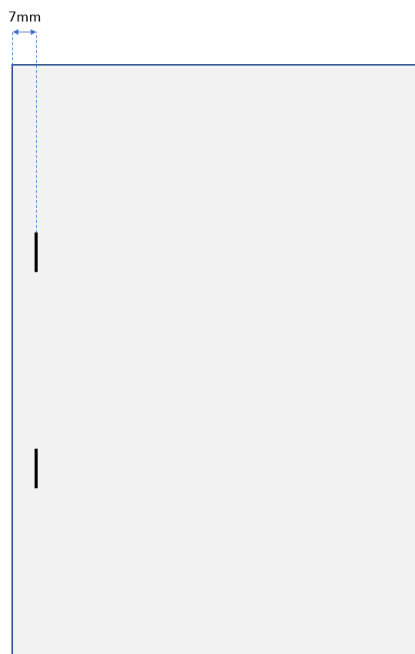
Corner and Edge Staple specifications*

Specification of Corner Stapling mode for A4 LEF and Letter LEF sizes described below:



Note! The corner stapling position is fixed for any sheet size and cannot be modified.

Specification of Edge Stapling mode described below for all compatible paper sizes:



Note! The edge stapling position is fixed for any sheet size and cannot be modified.

*Corner and Edge stapling not available in US Market.

Install Planning

Device Configurations

The following booklet maker configurations are available:



BLM435e and HFBU*

The Booklet Maker “base unit” in the configuration, includes the standard output tray. The optional Hand Feed Bridge Unit (HFBU) adds hand feeding capability.

Stapling / Folding / 35 Sheet Capacity (performance kit not available in this configuration)



BLM450e or BLM435e with a Finishing Module and HFBU*

Booklet Maker with the FM400e Finishing module adds face trimming and square folding. Considered the standard configuration. The standard output tray is moved from the booklet maker over to the output tray of the Trimmer.

When a customer orders a BLM450e the technician will enable the 50-sheet capacity during installation by installing the performance kit/50-sheet kit in the BLM435e Base unit.

Stapling / Folding / Squareback/ Face Trimming / 50 or 35 Sheet Capacity

NOTE: The 50-sheet version requires an FM400e Finishing Module



BLM450e or BLM435e with Finishing Module, RCT and HFBU*

Production Booklet Maker with the FM400e Finishing module and the RCT Rotate Crease Trimmer module. Adds full bleed capability, increased productivity on small sheet sizes and creasing of covers and centrefolds.

Stapling / Folding / Squareback/ Full Bleed Trimming / Creasing / Rotation / 50 or 35 Sheet Capacity

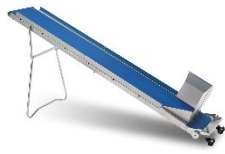
NOTE: The 50-sheet version requires an FM400e Finishing Module

NOTE: FM400e Finishing Module is required if configuration includes an RCT Module.

*Systems that do not include an RCT in the configuration, must be installed together with the **Hand Feed Bridge Unit** equipped with the **antistatic** option.

System Dependencies and Prerequisites

The following options have conditions depending on configuration:



All configurations that include the RCT module can also be equipped with the **TWC Trim Waste Conveyor 2.0**



All configurations that include the FM400e Finishing module can be equipped with the BST4000-1 **Book Stacker Module**



Systems that do not include an RCT in the configuration, must be equipped with the **Hand Feed Bridge Unit**.



Antistatic kit general – one eliminator (for HFBU)

The Hand Feed Bridge Unit must be equipped with the Plockmatic Active Anti-Static solution when the RCT is not in configuration.

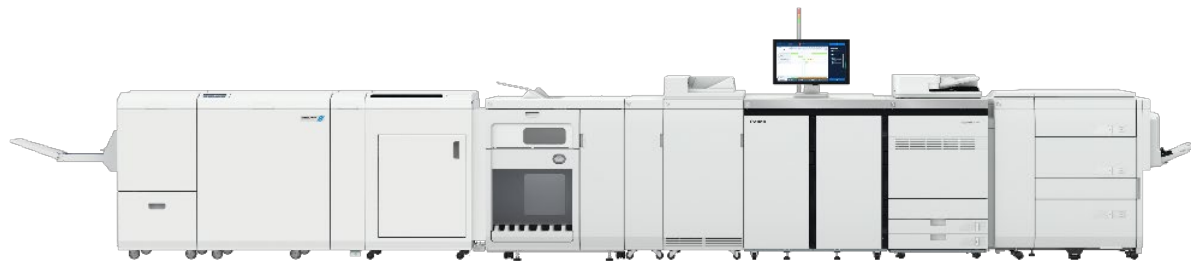
Compatible Presses

The Plockmatic BLM435e/450e is compatible with the following Canon printers:

imagePRESS V900 Series



imagePRESS V1000



imagePRESS V1350



Note: all Fiery versions supported on V900, V1000 and V1350 will also support BLM450e/435e

varioPRINT140 Series



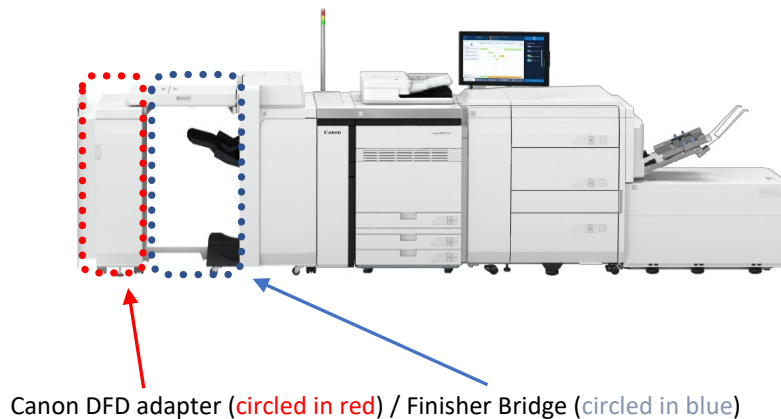
Upstream Canon Interface

The BLM450e/BLM435e attaches after the Canon High-Capacity Stacker (H1/J1), to the Canon Bridge via the DFD adapter or directly to the DFD adapter.



The High-Capacity stacker requires the following kits:

1. DFD Interface Kit-A1, Mercury code: **7168B002BA**
2. DFD+ serial interface kit-A1, Mercury code: **7168B033AA**
3. DFD Paper Path Kit 860-B1 (H=860), Mercury code: **7168B016BA**



The Canon Bridge requires the following kits:

1. Finisher Bridge-A1, Mercury code: **8117B076AA***
2. DFD Adapter-B1, Mercury code: **8117B102AA****

*The Bridge is only required when the customer needs a dedicated corner stapling device such as the AG1/AF1. It is possible to attach the booklet maker system to the DFD Adapter-B1 without including the Finisher Bridge-A1.

**The DFD Adapter-B1 has a standard output height of 860 mm, a docking bracket and the correct DFD+ electronic, therefore whenever this module is included, it is neither necessary to add the DFD Paper path Kit 860-B1 (H=860) nor it is necessary to add the DFD+ serial interfaced kit-A1.

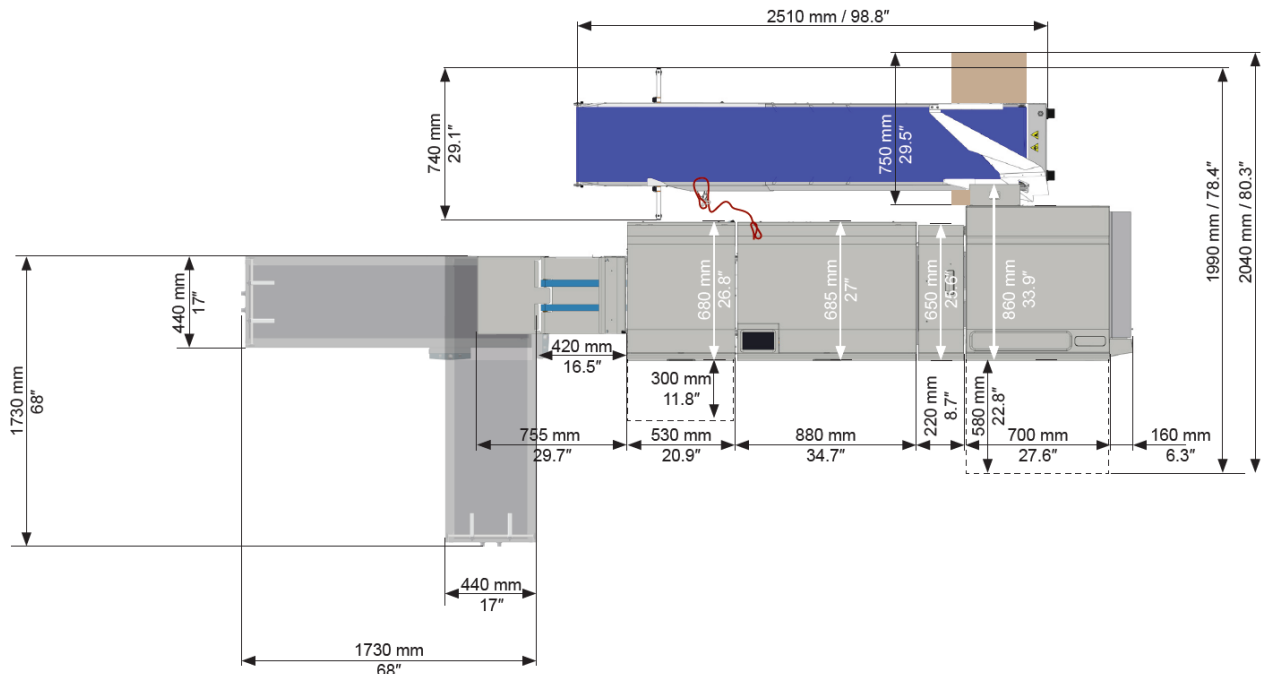
Dimensions and weights

Footprint

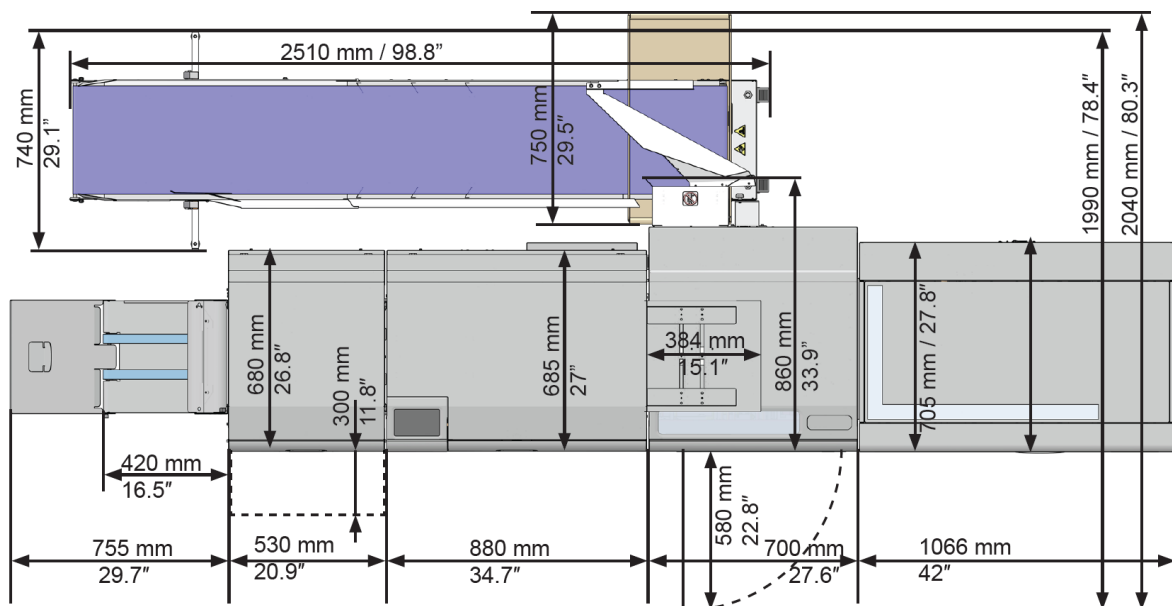
NOTE: The Optional 50 sheet / performance upgrade kit does not impact floor space requirements.

NOTE: Service Access is required on all sides of the system (800 mm / 31.5" per side).

Plockmatic BLM450e/BLM435e (inline) Production Booklet Maker floor plan



Plockmatic BLM450e/BLM435e (offline) Production Booklet Maker floor plan



The optional high-capacity Belt Stacker BST4000-1 connects to the Finishing Module and can be placed either in-line or angled to the Booklet Making system. The BST4000-1 measures 1730x440mm / 68x17".

Weight and Size

All main modules are shipped in palletized cardboard boxes. Pallet jack or forklift is needed to move pallets around premises.

		BLM435e Main module	FM400e	RCT 3.0
Item Name		Booklet maker	Finishing Module	Rotate Crease Trim module
Country of Origin		Latvia	Latvia	Latvia
Plockmatic Part no.		13208110	13308000	12208100
Mercury Code		4754V834	4754V835	4186V849
Weight	Net	147 kg / 324 lb.	119 kg / 262 lb.	212kg / 468lb
	Gross	241 kg / 532 lb.	175 kg / 386 lb.	280 kg / 617 lb.
Packing Method		Cardboard on pallet	Cardboard on pallet	Cardboard on pallet
Packing Dimension	L	1200mm / 47.3"	1200mm / 47.2"	1200mm / 47.3"
	W	1000mm / 39.4"	800mm / 31.5"	1000mm / 39.4"
	H	1582mm / 62.3"	1305mm / 51.2"	1582mm / 62.3"
Number of units/CTN		1	1	1
Max Stack Height	Storage	3	3	3
	Transport	2	2	2
Printer compatibility		imagePRESS V900, V1000, V1350, varioPRINT 140		

		Performance upgrade kit	Trim Waste Conveyor 2.0	Universal antistatic kit
Item Name		Performance / 50 sheet upgrade kit	Trim waste conveyor for RCT module	Antistatic kit for: Hand feed bridge unit or RCT3.0
Country of Origin		Latvia	Latvia	USA
Plockmatic Part no		13700022	12200032	13200017
Mercury code		4186V853	4186V856	4754V836
Weight	Net	0,07 kg / 0.15 lb	30 kg / 66 lb	2.1kg / 4.6lb
	Gross	0,1 kg / 0.22 lb	70 kg / 154 lb	2.5kg / 5.51lb
Packing Method		Carton	Cardboard on pallet	Carton
Packing Dimension	L	180mm / 7.1"	1200mm / 47.2"	435mm / 17.2"
	W	120mm / 4.8"	800mm / 31.5"	285mm / 11.3"
	H	55mm / 2.2"	720mm / 28.4"	160mm / 6.3"
Number of units/CTN		1	1	1*

* 1 universal antistatic kit is needed for each option – if installing on both options, 2 kits will be needed

		VFX High-Capacity Feeder**	BST4000-1	Staple Cartridge*
Item Name		VFX	High-capacity belt stacker	Plockmatic production staple cartridge
Country of Origin		Latvia	Latvia	Sweden
Plockmatic Part no		12508200	4707000	760030
Mercury Code		4186V857	3057V767	3060V722
Weight	Net	250kg / 551lb	70 kg / 155 lb	1,2 kg / 2.65lb
	Gross	310kg / 683lb	85 kg / 187 lb	1,3 kg / 2.87 lb
Packing Method		Cardboard on pallet	Carton with beams underneath (for lifting with forklift)	Carton
Packing Dimension	L	1200mm / 47.2"	1500mm / 59"	225mm / 8.86"
	W	800mm / 31.5"	550mm / 21.7"	90mm / 3.55"
	H	1430mm / 56.3"	540mm / 21.3"	90mm / 3.55"
Number of units/CTN		1	1	1*

* 3 Cartridges per unit

**VFX and its options are only available in US market

		Hand Feed Bridge Unit	BRC kit for VFX**
Item Name		Hand Feed Bridge Unit	KIT BARCODE-ID30 VFX
Country of Origin		Latvia	Latvia
Plockmatic Part no		13200014	12500028
Mercury Code		4754V838	4186V858
Weight	Net	27.3kg / 60.2lb	-
	Gross	63.3kg / 139lb	0.6 kg / 1.3lb
Packing Method		Carton	Carton
Packing Dimension	L	1200mm / 47.2"	335mm / 13.2"
	W	800mm / 31.5"	245mm / 9.65"
	H	475mm / 18.7"	105mm / 4.13"
Number of units/CTN		1	1

Electrical Requirements

North America

100V - 120V, 60Hz, 4A +6% -10%,

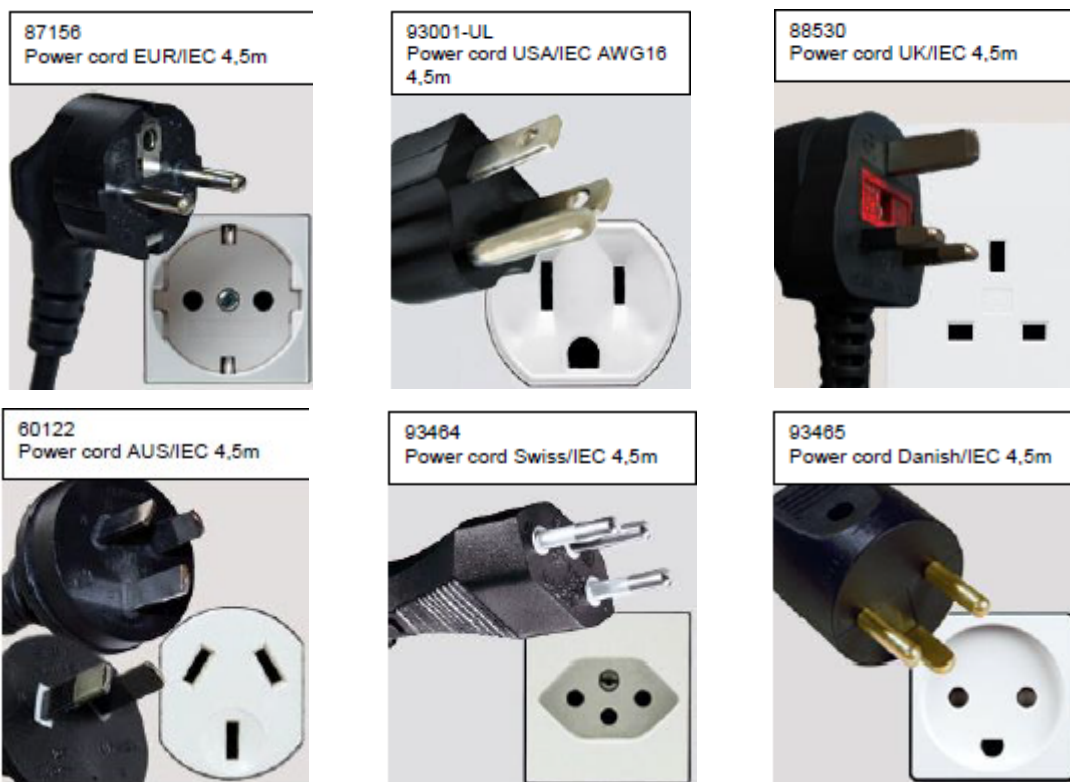
Power consumption: 250 - 300W, idle or 400W, peak

Europe

220V - 240V, 50Hz, 2A +6% -10%,

Power consumption: 250 - 300W, idle or 400W, peak

Plockmatic provides the following cable kit for each module that requires a power cord.



Six different types of power cord, one per geographic region, and an extension cord are included in the power cord kit. The combined length of the power cord and the extension cord is 4.28m / 168.5".

Leads supplied:

1. Power cord USA NEMA 5-15/IEC AWG-14 (80mm / 3.14" long)
2. Power cord EUR/IEC 1 mm² (80mm / 3.14" long)
3. Power cord DNK/IEC mm² (80mm / 3.14" long)
4. Power cord AUS/IEC mm² (80mm / 3.14" long)
5. Power cord Swiss/IEC mm² (80mm / 3.14" long)
6. Power cord UK/IEC mm² (80mm / 3.14" long)
7. Extension cord IEC13/C14 (4.2m / 165.3" long)

Environmental Requirements

System is tested in the following environmental zones:

Air humidity: 30% - 80% RH

Temperature: 15 – 28 degrees Celsius or 59 – 82 degrees Fahrenheit



For optimum performance of the system, environment should be kept within 40% - 50% RH and room temperature should be within 18 – 26 degrees Celsius or 64 – 78 degrees Fahrenheit.

Low humidity (below 40% RH) and lower temperatures increase the risk of static issues, and the optional Anti-Static kit should be included in the configuration if RCT is part of the system. Also storing media under humid conditions before processing may result in higher jam rate.

Estimated Installation Time

A configuration that includes an RCT, BM and FM takes one engineer 1 day to install, adjust and test before operator training can begin.

Operating Supplies

Staple Cartridge: 5000 Staples / Cartridge. Each cartridge box contains 3 cartridges in each box.

(Required 2 staple cartridges per machine)



Interchangeability

This staple cartridge is unique for Plockmatic Booklet Making systems and is not interchangeable with any other finishers. Using different staple cartridge or a copy of the original will result in **reduced penetration performance on coated media.**

Limitations

The following list of mechanical limitations have been observed during the validation process of the BLM450e/435e system.

- The BLM450e/435e system is suited for customers whose booklet making needs will not exceed an average of 30,000 booklets per month;
- If sheets entering the BLM450e/435e system are not uniform or if they are skewed, the booklet quality will vary accordingly;
- Non-stapled books should not be trimmed or square folded;
- A large amount of face trimming (>100mm) may produce excessive trim waste larger than trim waste bin. This may result in difficulty emptying trim waste and frequent production stops due to trim waste bin full;
- If booklets are made of paper lighter than 80GSM, the cover paper should be 80GSM or more to get an acceptable output result when square folding;
- Jams might be experienced when feeding sets made of several sheets of 300 gsm or heavier with a shorter paper length than A3, depending on thickness and density;
- Covers may show marking along the spine of the booklet from the clamps in the Finishing Module. The more pages in the booklet, the more evident the marking;
- The booklet spine can, depending on paper quality and thickness, have different sizes of tuft at its top and bottom;
- Staple position may vary on the spine when being square formed, especially on thicker booklets. Moving staple position so staple is centered on the spine will reduce this phenomenon.
- Staple may be radius shaped (bent) when square folding. Moving staple position so staple is centered on the spine will reduce this phenomenon.
- For some sensitive, white coated stock, such as “Silk type” two sided coated paper, occasional fold roller marks may be observed on the “top side” of the book.
- For jobs with multiple sheets of 200 gsm or heavier, the square folding function is recommended to be switched on for an acceptable output and to avoid feed problem at output.
- Heavy weight media will show image crack in the spine: pre-crease the cover in the RCT module to avoid cracking.
- Marks from the fold knife may appear on sensitive media on the inner sheet. These marks are more common on thicker books with high toner coverage on the center sheet. Toner smearing from the fold knife can be removed/reduced by running a number of unprinted booklets of uncoated paper.
- The maximum recommended number of sheets that can be bypassed without stapling is 2 sheets of 80 gsm. If there is very low friction between the sheets, running non-stapled sets may be difficult.
- Curled sheets coming out of the Upstream Device will result in increased JAM rate or paper damage. Flat Curl amount above 10 mm is outside specification. Place sheet on flat surface with the curl going up. Measure distance from surface to tip of curled sheet. If distance is equal or greater than 10 mm curl amount is out of spec.
- Sheets may show marks from the “registration rollers” in the RCT module. Changing media will improve the situation. This phenomenon has been seen on the following media:
 - OK Top coated: 157 gsm
 - OK Art post : 186.1 gsm
 - Color Copy coated glossy: 135 gsm
 - OK Top coated: 127.9 gsm
 - Cocoon Silk: 250 gsm
 - Mohawk Color Copy Gloss: 216 gsm
 - OK Art post: 209.4 gsm
- Corner and Edge stapling function can only be used when printing in duplex.

- If experiencing jams while running Corner and Edge stapled jobs, changing media used and storing media in a climate-controlled environment may help reduce the jam rate. Wavy and curled media will lead to a higher jam rate.
- On some coated media, staples may not completely penetrate the set resulting in a faulty staple. If problem persists, consider changing media. Staple may not be able to penetrate the number of sheets indicated by the “Set Size Guide”. Some uncoated extra “dense” paper may show the same limitation. The following list shows examples of media where this has been observed:
 - Futura Laser Gloss 80c
 - Hammermill Laser Print
 - OPUS Gloss
 - Mondi Color Copy 200 gsm
 - Sterling Premium Digital Gloss 80T
- When trimming small amount (less than 5 mm or 0.2”) in the FM module on books made from more than 2 sheets, the cut may not be clean, leaving trim waste hanging from the book.
- For some media, the legs of the staples may not be properly clinched causing the legs of the staple to be spaced away from the inner sheet. This phenomenon occurs on extra thick books over 40 sheets made from “soft” paper (recycled and some non-coated media mostly). This phenomenon has been observed on:
 - Mondi Color Copy 120 gsm
- Marks around the staple position on the outside of the booklet cover may be caused by dirt deposits underneath or on the staple. Changing media may improve. Changing staple cartridge will improve.
- Grey marks around the staple area in the center of the booklet may be caused by metal dust from the staple. This phenomenon is worse on matte coated media. Changing media will improve. Cleaning the clincher area will improve. Trying to get the staple more centred inside the book may also improve.
- Grey marks around the staple area on the spine can sometimes be observed when using the SquareBack module. This may be caused by dirt deposits underneath or on the staple that are picked up by the SquareBack roller during the SquareBack process. This phenomenon occurs more for some coated media and for higher SquareBack Pressure Settings. Selecting a lower SquareBack pressure setting may improve. Switching off the SquareBack may improve. Changing staple cartridge may improve.
- An overly strong SquareBack setting and a slightly misaligned center sheet will cause wrinkles along the inner sheet spine. Selecting a lower SquareBack setting will reduce this phenomenon.
- For booklets without Face Trim, the trailing edge of the booklet may be damaged by the drive belts on the stacker. Plockmatic recommends using Face Trim or thicker sheets to minimize damage.
- Extra heavy media (over 300gsm) may not rotate correctly in the RCT module. As a workaround, operators can try to run media in SEF mode. This may help. This phenomenon has been seen on the following media:
 - Reina (A4 348.8 gsm).
- Books made from 1-3 sheets of thin media longer than 420 mm may show fold quality variation. If this occurs, change media to improve quality.
- On thin books (2-4 sheets) that do not have the staple position centred in the fold line paper tear or paper damage may occur around the staple legs as the book passes through the fold rollers. This is more common when thin media (below 90gsm plain and 110gsm coated) is used. If this issue occurs, moving the staple position so it aligns with fold line might help.
- Thin media (below 110 gsm) in warm and humid environments may be difficult to feed through the RCT module. The RCT may in this situation create streak creases coming from the fixing rollers and the sheets not being flat as they enter.
- Books made folded over the long edge (menu style books) without SQF may unfold and as a result they will stack poorly on stacker. For menu style books the SQF function is recommended.
- For some media trim waste from the RCT can get stuck in the waste chute causing a jam. This phenomenon is worse in dry environments without climate control when the risk for static output is higher. Installing the optional Antistatic kit in the RCT may improve this situation.
- If system is installed in area with cold winters (Northern USA, Canada and Northern Europe) in a room without climate control the option Antistatic kit is recommended.

- For thick booklets with a thin cover, the cover can be “pulled back” during the registration process in the Face Trimmer. This can result in the cover sheet not being trimmed. Recommendation is to use a heavier cover whenever possible.
- Simplex printed sheets sent in-line from the printer are not supported neither when using the Corner and Edge functions nor when producing booklets. This operation mode is generally less tested and may include limitations in the integration.
- Running a job outside the set size guidelines may lead to an increased jam rate, uneven squareback or inaccurate face trimming on the finished booklets.
- When using side trimming, best performance is achieved if trim strips are between 10mm – 20mm.
- When running jobs on the varioPRINT140, depending on media type, print job and print coverage, the rotation function of the RCT module may leave marks on the sheets. Other areas of the system (in the RCT, BM and FM) may also leave marks on the sheets. Reducing print coverage, changing media type or cleaning the system per operator manual instructions may help reduce these phenomena.
- When using the queuing functionality on the varioPRINT 140, all jobs in the queue must use the same paper size.
- When processing heavy media in the RCT module, limitations may occur in the sheet rotation function. These limitations can affect sheet registration after the rotation step. As a result, this may lead to skewed side trimming and/or misalignment of the crease line. In more severe cases, an increased jam rate may be observed. This behavior is typically noticeable when running media of 170 gsm or heavier. Coated Glossy media has been observed to be more susceptible to these effects.

Recommended Actions:

- Contamination of the rotation rubber rollers can exacerbate this issue. To minimize the impact, ensure that the rotation rubber rollers are cleaned regularly.
- It is recommended that the operator cleans the rotation rubber rollers at least once per week, or as needed, using a damp cloth with warm water.

If issues persist, run the job in SEF (Short Edge Feed) instead of LEF (Long Edge Feed), where possible, to avoid the rotation step.

Limitations related to VFX Module (offline configuration only)

- The Optical Double Sheet Detection sensors in the VFX should not be turned on when feeding 200 gsm / 74 lb Cover or higher density paper. You may also have to avoid using this function when processing pages with heavy dark areas.
- The Optical Double Sheet Detection sensors cannot be turned on when feeding mixed media from the trays of the VFX. When mixed media is used only use the Ultrasonic DSD sensor.
- When loading paper in the trays of the VFX, make sure that it has the same direction of paper curl: paper with different curl directions cannot be mixed, doing so would result in a misfeed or a jam.
- When loading paper in the trays of the VFX make sure that its wave curl is not greater than 2 mm otherwise a paper jam might occur.
- Auto Feeder Mode in the screen Advanced Feeder Settings is optimized for pre-printed papers. When running white un-printed papers in Auto Feeder Mode, fan settings may not work correctly. For optimum performance on un-printed papers, please turn off Auto Feeder Mode and follow procedure for MANUAL fan settings described in the operator manual.
- For optimum performance in the VFX, media shall be stored in a climate controlled environment. For media stored in environment with relative humidity over 50% performance of the VFX may be reduced. The following media types have shown this phenomenon: Mondi Color Copy Gloss 250 gsm A4 SEF
- Thin media <70 gsm with smaller sheet sizes (A4 SEF, 8.5 x 11” SEF or A5 LEF) may show higher jam rate than normal. The following media types have shown this phenomenon: My Paper / 67 gsm / A5
- For media that is less flexible (stiff) media in the interval 300 gsm – 350 gsm feeding may not be possible. The following media types have shown this phenomenon: River Shetland paper / 350 gsm / SRA3
- The VFX might produce pressure marks on lowest paper in the paper pile if media is sensitive.

- The VFX is suited for customers whose processing needs will not exceed a monthly average of 200,000 sheets from each tray.
- The VFX might show marks from the vacuum belts when running extra thin media. This issue might occur when using 80 gsm plain and 100 gsm coated types of paper. The recommended solution to this is that of using MANUAL process settings (rather than Auto Feeder Mode) and to reduce the vacuum amount. This will reduce / eliminate such marks.
- When the trays in the VFX are used in MANUAL MODE, the Process Position can only be set to 10 or lower. If higher Process Position is used, MAX load capacity will be reduced by approximately 5 to 10 mm.
- In humid non climate-controlled environments an increased number of double feed jams has been observed in the VFX.
- For optimum feeding performance in the VFX, the paper stack should be “fanned” by the operator prior to loading the tray. This reduces the risk of double feed from the trays. For more information, see “Paper Stack Preparation” in section 1 “Basics”.
- The Ultrasonic Double Sheet Detection Sensors in the VFX does NOT work on all 400 gsm types of paper, as paper density can vary significantly ($900/50 = 1800\%$ in one sheet).
- The trays in the VFX might have problems feeding the last sheet when processing thicker media (thicker than 350 gsm).
- If installing the optional barcode readers, the following limitations apply:
 - Higher misfeed/jam rate with A4/letter size media loaded in LEF, even if the Barcode reading functionality is not in use
 - When using the barcode reader functionality and feeding the body sheets from one VFX tray and the cover sheet from the other VFX tray, it is mandatory to have the barcode on both body and cover sheets.