Product instruction manual Magnum MCPF-35

# MAGNUM



The Magnum has been designed to be user friendly, however we strongly recommend you take a few minutes to read through this manual to ensure correct operation.

Keep this manual safe for future reference.

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### **Chapter 1: Product Introduction**

#### **1.1 Preface**

The MCPF-35 is a digital control machine with automatic feeding, creasing, and folding functions. The maximum speed for A4 half fold can be 5400 sheets per hour. Thank you so much for choosing our machine. Please read all the chapters of this operation manual before operating the machine. Without fully understand this manual, please do not operate the machine. Please keep this manual near by the machine, in order to check information if needed. If there is any problem during operation, please contact the seller.

#### **1.2 Machine Specification**

Package size (length x width x height): 152 x 870 x 1216mm Machine full size (length x width x height): 2168 x 584 x 1159mm Paper weight/thickness: 128g - 350g / 0.15m<sup>2</sup> - 0.35m<sup>2</sup> Maximum infeed paper size (width x length): 330 x 900mm Minimum infeed paper size (width x length): 160 x 160mm Minimum distance between the first crease line and the lead edge: 5mm Minimum distance between the last crease line and the tail edge: 5mm Minimum distance between two crease lines: 0.1mm Minimum distance between the first perforate line and the lead edge: 30mm Minimum distance between the last perforate line and the tail edge: 5mm Minimum distance between two perforate lines: 8mm Crease times: 32 lines Crease fold speed (A4 half folding): 5400 sheets per hour Only crease speed (A4 one-crease line on middle): 6300 sheets per hour Minimum distance between two folding lines: 70mm Minimum distance between the first folding line and the lead edge: 70mm Minimum distance between the second folding line and the tail edge: 70mm Folding types: 7 Folding accuracy:  $\pm 0.5$ mm Maximum paper load: 100mm Total count: folding count, and sheet count Skewing adjustment: ±2mm Maximum saved jobs: 64 Progressive crease types: 4 Crease depth: automatic or manual Optional crease width: 0.4/0.6/1.2/1.4mm Power: 220V/7A, 50Hz/60Hz, 1200W Machine weight: 200kg Note: The machine is continuously upgrading. All the information in this manual will upgrade without public notification.

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### **Chapter 2: Safety**

#### 2.1 Environment

Altitude: below elevation 1000m

Humidity: 30% to 70%

Temperature:

Below 10°C	Machine may not operate properly
10°C to 18°C	Non-suggested operation temperature
19°C to 28°C	Suggested operation temperature
29°C to 38°C	Non-suggested operation temperature
Above 38°C	Machine may not operate properly

Note: make sure there are no combustibility, corrosive gas or oil mist around the machine.

### 2.2 Warning

Be aware of that if any metal or flammable thing inside machine, it may cause fire or electronic shock. In this case, shut down the power immediately, and disconnect the cord. Then, please contact the technician.

Also, if there is any anomaly show up in the machine, such as overheat, smoke, or smelly, please shutdown the power immediately, disconnecting the cord, and contact the technician.



AC input, Voltage/Frequency is: AC110~220V/50-60Hz.

! If the voltage or frequency are not in the range,

the machine may not be used normally or even may



Power cord, Over 10A current is endurable

! 1. Do not remove the cord when the machine is running,

illegal operation may cause component damage or machinery jam



Ground symbol. If you see this symbol in any place, please do not touch it anyhow, or uninstall it. ! If the ground is not well connected, it may cause

human body injury.

Do - Read this manual and fully understand before the operation.

Do - Check the *plug* and *machine voltage and frequency* to your main supply, and that the socket has a correct working earth lead for this single insulated machine

Do - Make sure all safety covers are in place. The top covers have an interlock switch which will disable the unit if removed

Do – Open or close the cover slowly

Do - Contact the local maintenance center before you have to move the machine.

Do - Disconnect the power before clean the inner side.

Do - Unplug the cord if you won't use the machine for a long while,

Do - be careful of the blade edge

Don't - Install the machine on an unstable ground.

Don't - Operating with wet hand, especially plug or unplug the cord.

Don't - Wear long hair, loose fitting clothes or put your fingers into the creasing unit nip, while operation.

Don't - Place any receptacles with any liquid on any surface of machine.

Don't – Put tiny things/pieces in the machine, especially the loading table.

Don't - Alter or uninstall the machine, unless by *Dumor* authorized engineer.

Don't - Touch any running parts while operation

Don't - Shut down the machine while operation.

Don't - Put heavy matter on machine or shock it.

Don't - Put the side guide under the feeding system.

Don't – Put any metal or flammable thing in the machine, it may cause fire or electronic shock. If it happens, shut down the power, disconnect the cord, and then contact the technician.

# **Chapter 3: Main Parts**

### 3.1 Machine's overall diagram



#	Part name	Description
1	Folding unit	Make different types of folding
2	Paper collector	Collect paper without folding
3	Automatic conveyer	Collect paper after folding
4	Folding top paper guide	Guide paper during folding
5	Touch screen	Digital control
6	Loading table (or feeding tray)	load and automatic feed paper
7	Crease unit	Infeed and crease lines
8	Stand	Support and storage

### **Chapter 4: Installation**

#### 4.1 Touch screen installation

Find the screen, install it and connect the cable. Steps as follow:

Step 1: Uninstall the 2 screws fixing the screen cover (picture #1), as well as 4 screws fixing the screen rear cover (picture #2 & #3) to take off the rear cover. Remove the 2 screws from the bracket (picture #4).



Step 2: Plug the cable into socket (picture #1). Reinstall the rear cover back and fix the screen in a proper angle (picture #2). Fix the whole part onto machine with two screws (picture #3 & #4).



### 4.2 Automatic Conveyer Installation

#### 4.2.1 Automatic Conveyer Main Body

As the following photos, first unbox the Auto. Conveyer (figure 4). And then hang the

Auto. Conveyer into the machine outfeed area, shown in figure 1 to 4.



#### 4.2.2 Automatic Conveyer Extension

As the below photos, install the extension plate into the Auto. Conveyer.



#### 4.2.3 Wheel Set Installation

As the following photos, the red circle in figure 1 shows the screws for install the wheel set into the Auto. Conveyer's side guide block (same to the other side). After tight the screws, please move the wheel set toward and back ward twice. Make sure the wheel set can smoothly moving. Next, connect the communication cable, shown in figure 2.



#### 4.2.4 Adjustable paper collector assembly

As the following photo, hang the adjustable paper collector assembly into the machine with the 3 red circled area. Note: Since the paper will exit on there and return to internal during folding, please make sure the exit paper will not hit any side and back guides.



# 4.3 Outfeed paper deflector & Top paper folding guide installation

#### 4.3.1 Outfeed paper deflector

Please find the outfeed paper deflectors from the package.

Install the outfeed paper deflectors on the folding unit's outfeed area. There is a shaft which expose 4 areas for install those deflectors, shown in below photo in red circles. Please make sure the deflector is 1mm far away from the green belt. This gap is better for operation without parts crash.



#### 4.3.2 Top paper folding guide

Please find the top paper folding guide in the package.

First of all, follow the figure 1 to put the guide on the lower fixing pin of two side. Then, make sure the two side locks of the guide are released (move up is released and move down is locked). Next, following the figure 2 to rotate the guide toward to the feeding tray direction, which will make the guide into a position that the lock is on the upper fixing lock. Finally, push down the lock to fix the top paper folding guide.





# 4.4 Feeding table extension plate installation

In below photo, there are 3 screws circled in red. Those are for install the extension plate on the feeding table. Please make sure the screws are tight.



# 4.5 Paper deflector and Paper guidepillar

As the following photo, the pillar paper guides need to be located on an area, where they can guide the paper feeding straightly without skewing. And, they will not press the paper too much (or too loose).

In order to make a suitable gap between pillar paper guides and the load of paper, here is a suggestion for user to try: during locating the pillars, a 157GSM paper can be used to insert between the pillar paper guide and the load of paper. After the pillars are well pressuring the load of paper, the 157GSM paper can be removed. That can make a suitable gap between them.

Paper deflector is about 1mm away from the skewing adjustment wall. The paper deflector avoid paper crash and flapping. For thin paper, please use long deflector. For thick paper, please use short deflector.



#### Note:

1. (a) When using thick paper (250gsm to 350gsm), remove the two long paper deflector. Only use the short deflector and locate it near the pillar paper guide about 1mm.

(b)When using thin paper (157gsm to 200gsm), remove the short deflector and use two long deflector.

That can avoid skewing product because of paper's side flapping. 2. Paper deflector B is for avoiding paper flapping during infeed. Then the paper can feed along the skewing adjustment wall smoothly. It avoids to make

paper can feed along the skewing adjustment wall smoothly. It avoids to make the skewing product which caused by the unstable infeed.

3. The function of paper deflector A is same as paper deflector B. They are suggested to be used during every jobs.

4. (a) When pillar paper guide is pushed load of paper (to non-operation side) too much, paper cannot be fed to the infeed rollers. It will cause machine show paper jam error message.

(b) When pillar paper guide is away load of paper, paper cannot be fed stable. It will cause skewing product.

(c) When blowing air is too strong, it will also make skewing product. The blow air power need to be adjusted in a suitable level, which can blow the paper but the paper will not fly. For thin paper, the blowing power need to be low.

# 4.6 power plug and switch



As the photos, the machine's power is on the right side of user when the user is facing operation side.

Before operating, please connect the power with power cable, then turn on the machine.

Warning: before turn on the machine, please make sure the feed table (feed tray) does not have any unacceptable (or non-expectable) object, especially the area under suction unit.

## Chapter 5

### 5.1 Welcome screen

When clicking the display, please does not press too hard. Otherwise, it will damage the display.



In the welcome screen, there are information as follow:

- 1) Software version;
- 2) Total sheet count;

3) Number of Crease: which is the total creased line of the machine;

4) Number of K1: which is the total folded number of lower folding knife of the machine;

5) Number of K1: which is the total folded number of upper folding knife of the machine;

6) SN: series number of the machine.

Click the "OK" button in right corner can go to next menu.

## **5.2 Touch screen calibration**

User doesn't press the OK key but clicks other place of screens 3 or more times continuously. Screen will enter calibration mode and a red dot appears in the screen. User click the dot with a pointy pen step by step, then screen will enter welcome screen. Calibration is finished. This should be done while the touch screen could not be touched properly.



# **5.3 Home Screen**

After click the "OK" button of the welcome screen, the main screen will show up.



#	Name	Explanation
1	Edit	When user need to make a new job
2	Set	Machine setting; service mode; screen light and unit
		adjustment
3	Down	Feed table go to the lowest level
4	Open	Open the saved jobs
5	Run	Go to run screen

## 5.4 Data preview screen

When click the "edit" button, the data preview screen will show up.



#	Name	Explanation
1	Home	Return to home screen
2	Paper data	Input paper's length, width, thickness, and crease depth else
3	Crease data	Input each crease line's position
4	Cover func.	This button will go to cover function setting screen
5	Progressive	This button will go to progressive function setting screen
	func	
6	Folding data	This button will go to folding setting screen
7	Stretch	Crease/fold position stretch
8	Shrink	Crease/fold position shrink
9	Forward	Crease/fold position move forward, (feeding direction is
		forward); every time 0.1mm
10	Backward	Crease/fold position move backward, (feeding direction is
		forward); every time 0.1mm
11	Run	Go to run screen
12	Save as	Save current job
13	Down page	Go to view down page's data

### 5.5 Paper data setting

In the data preview screen, click the "paper data" button. The following warning message show up.

"Yes" button clear all current data;

"No" button keep all current data.



Then, the paper data setting screen shows up.



#	Name	Explanation
1	Return	The suggested crease tool message will show up. Click
		"OK" will return to data preview screen
2	Length	Manual setting: Click the white area, it will turn to blue,
		then input the paper length, and click "Ent".
		Or, Click the 4 preset data in area 8.
3	Auto.	Automatic measure the paper length.
	Measure	
4	Width	Manual setting: Click the white area, it will turn to blue,
		then input the paper width, and click "Ent".
		Or, Click the 4 preset data in area 8.
5	Thickness	Manual setting: Click the white area, it will turn to blue,
		then input the paper thickness, and click "Ent".
6	CR Depth	Manual setting: Click the white area, it will turn to blue,
		then input the crease depth, and click "Ent".
		Or, use the "auto" key in area 7.
7	Auto	This auto button will automatic calculate the crease depth
		base on paper thickness.
8	Preset data	There are 4 preset data (paper length and width).
9	С	Clear the selected data.
10	Ent	Enter key; it is for confirm the input value.
11	Number keys	Numbers for input; + & - will add or reduce 0.1mm.

After paper data setting, click the return button. The following message will show up. It will give a suggestion about the crease tool base on the inputted paper thickness.

Return Length: 4			2	3	-
Width: 3			5	6	+
Thickness' (	Please Use 0.6mm Crease Knife		8	9	Esc
CR Depth: 2	for Best Result.	ок І	0	С	Ent
			8	A3	
		SRA	1	A4	

Crease tool	Suggested paper thickness (gsm)
0.4mm	0.10.15g
0.6mm	0.150.25g
1.0mm	0.250.3g
1.2mm	0.30.35g
1.4mm	0.350.4g

### 5.6 Crease data setting

In the data preview screen, click the "crease data" button. The screen of crease data (figure 1) will show up. Input the crease value 1 by 1, for example, first crease is 100mm; second crease is 200mm (figure 2). Then click the return button. It will return to data preview screen, and the inputted data will show in the screen. (Note: Max 32 crease lines, and every line's value has to be larger than before value.)

Retu	NTB.							Ret	<u>1</u>						
1	0	7 0	13 0	1	2	3	-	1	100.0	7 0	13 0	1	2	3	-
2	0	8 0	14 0	4	5	6	+	2	200.0	8 0	14 0	4	5	6	+
3	0	9 0	15 0	7	8	9	Esc	3	0	9 0	15 0	7	8	9	Esc
4	0	10 0	16 0		0	С	Ent	4	0	10 0	16 0	-	0	С	Ent
5	0	11 0						5	0	11 0		No.			
1	0	12 0	Next		1	<b>N</b>		E	)°	12 0	Next			100	

If user wants to do crease-only without any folding, please click the "folding data" button (see the table in chapter 5.4, the 6<sup>th</sup> item). The message, shown in figure 3, will show up. Please click "no" to keep current crease data (unless user want to clear all crease data). Then, the folding data setting screen will show up. Click the "Crease-only" button, which is shown in figure 4.



Next, click the return, back to the data preview setting screen, shown below. This is a job with crease only.

Finally, click the "run" button to go to run screen to start the job.



Note: if user wants to do folding, user can directly go to the folding data setting screen and choose the preset job data (or manually input).

### **5.7 Cover function setting**

In the data preview, click the "cover func." button. The cover function setting screen will show up.



In the above figure, there are 5 preset data of cover function in the right bottom. Choose 1 of the 5 preset data, then the screen will show up some required information need to be inputted. After finished all setting, click finish to back to data preview screen. The data will changed base on the preset and inputted data.

Here is an example:



### **5.8 Progressive function setting**

In the data preview setting, click the "progressive func." button. The progressive function setting screen will shows up as below.



#	Name	Explanation
1	Progressive increase	Click progressive increase, it will show in the
		progressive mode, too.
2	Progressive decrease	Click progrssive decrease, it will show in the
		progressive mode, too.
3	Progressive increase	Click progressive increase then decrease, it will
	then decrease	show in the progressive mode, too.
4	Progressive ridge	Click Progressive ridge, it will show in the
		progressive mode, too.
5	Progressive mode	Shows current progressive function
6	Initial	First crease position
7	Varaiable	Different between two sheets' crease lines
8	Sheet	Total sheets
9	Batch	Total batch

#### **5.8.1 Progressive increase**

Choose the progressive increase (#1 in figure 1), it will appear next to the "progressive" (figure 1's red circle). Then, input the relative data, for example, initial: 20, variable: 1.0, sheet: 7, Batch: 0 (figure 2). Next, return to data preview screen. The data will show up (figure 3).

Initial:	0	4	5	6	+
Variable:	0	7	8	9	Esc
Sheet:	0		0	C	Ent
Batch:	0			-	
)		0	ff		



Progressive increase concept diagram:



According to above diagram, the initial means the first sheet's crease data. Variable means the different between two sheet's crease lines.

#### **5.8.2 Progressive decrease**

Choose the progressive decrease (#2 in figure 1), it will appear next to the "progressive" (figure 1's red circle). Then, input the relative data, for example, initial: 30, variable: 1.0, sheet: 7, Batch: 2 (figure 1). Next, return to data preview screen. The data will show up (figure 2).

Return		
Progressive:	1 2 3 -	
Initial: 30.0	4 5 6 +	<b>1</b>
Variable: 1.0	7 8 9 Esc	► 1
Sheet: 7	D C Ent	► 2 ► 3
Batch: 2		▶ 4
1	Off	
Progressive decrease concept diagram:		



According to above diagram, the initial means the first sheet's crease data. Variable means the different between two sheet's crease lines.

#### **5.8.3** Progressive increase then decrease

Choose the progressive increase then decrease (#3 in figure 1), it will appear next to the "progressive" (figure 1's red circle). Then, input the relative data, for example, initial: 20, variable: 0.5, sheet: 11, Batch: 2 (figure 1). Next, return to data preview screen. The data will show up (figure 2).





Progressive increase then decrease concept diagram :



According to above diagram, the initial means the first sheet's crease data. Variable means the different between two sheet's crease lines. For example, sheets number is 11. 1<sup>st</sup> to 6<sup>th</sup> are progressive increase by 0.5mm; then, 7<sup>th</sup> to 11<sup>th</sup> are progressive decrease by 0.5mm.

The book after this function can be opened flatly.



However, the book without this function cannot be opened flatly.



#### 5.8.4 Progressive ridge

Choose the progressive decrease (#4 in figure 1), it will appear next to the "progressive" (figure 1's red circle). Then, input the relative data, for example, initial: 210, variable: 0.3, sheet: 7, Batch: 2 (figure 1). Next, return to data preview screen. The data will show up (figure 2).





### 5.9 Folding data setting

After finished paper data setting (Chapter 5.5), choose the "folding data" button in the data preview screen. The following folding data screen will show up. The right bottom area have 8 buttons for auto setting. Those auto setting have preset data which will change with the inputted paper data. Or, user can input the folding data manually: first choose the folding type; second, change the folding lines' value manually. Click the return button after finish setup, then click the run button to go to run screen for making the product.



#	Name	Explanation	
1	Half fold	Click it for choosing half fold	
2	Letter fold	Click it for choosing letter fold	
3	Gate fold	Click it for choosing gate fold	
4	Offset fold	Click it for choosing offset fold	
5	Double half fold	Click it for choosing double half fold	
6	Crease gate fold	Click it for choosing crease gate fold; there is a	
		crease line in middle of a gate fold	
7	Z fold	Click it for choosing Z fold	
8	Crease-only	Click it for choosing crease-only (no folding)	
9	Fold type	It shows the current folding type	
10	Folding line 1	Folding line 1 position	
11	Folding line 2	Folding line 2 position	
12	Folding line 3	Folding line 3 position	
13	Roller	The outfeed roller in the auto paper collector	
14	Shingle	Set the collector's paper number; or, it can be said	
		the belt running time	

#### 5.9.1 Half fold Setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the half fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 210mm (420mm/2 = 210mm). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 210mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.2 Letter fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the letter fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 140mm (420mm/3 = 140mm); folding line 2: 280.8mm (140+140+0.8 = 280.8mm; the 0.8mm is thickness compensation calculate with 0.2mm paper thickness, and this value will change with thickness). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 140mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.3 Gate fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the gate fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 104.2mm (420/4 - 0.8 = 104.2mm, the -0.8mm is thickness compensation calculate with 0.2mm paper thickness, and this value will change with thickness); folding line 2: 315.8mm (420/4\*3+0.8=315.8mm; the 0.8mm is thickness compensation). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 210mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.4 Offset fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the offset fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 105mm (420/4 = 105mm); folding line 2: 210mm (420/4\*2=210mm). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 210mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.5 Double half fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the double half fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 105.2mm (420/4+0.2 = 105.2mm, the +0.2mm is thickness compensation calculate with 0.2mm paper thickness, and this value will change with thickness); folding line 2: 211.2mm (420/4\*2=210mm, the +1.2mm is thickness compensation); folding line 3: 316.4mm (420/4\*3 +1.4=316.4mm, the +1.4mm is thickness compensation). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 105mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.6 Crease gate fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the crease gate fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 104.2mm (420/4-0.8 = 104.2mm, the -0.8mm is thickness compensation calculate with 0.2mm paper thickness, and this value will change with thickness); folding line 2: 210mm (420/4\*2=210mm, and this is crease-only); folding line 3: 315.8mm (420/4\*3 + 0.8=315.8mm, the +8mm is thickness compensation). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 210mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





#### 5.9.7 Z fold setting

After finished paper data setting (chapter 5.5), go to the folding data setting. Choose the Z fold; its icon will appear in the fold type. And the preset data will automatic setup. For example, the paper of 420mm long will need folding line 1: 104mm (420/3 = 140mm); folding line 2: 280mm (420/3\*2=280mm). The roller position will setup, too. Those value can be changed manually. User can change roller position to other value (such as 140mm), as long as the product in the outfeed area will not crash next product and still be pressed by the outfeed roller smoothly. For the Shingle, it will change the distance that the second sheet stack on the first sheet. Larger value make two sheets far away; smaller value make two sheets closer. Click return button after finished setting, the data will show up in the screen. Then, user can go to run screen for the job.





### 5.10 Job save

After finished a job setting, user can click the "save as" icon (it looks like a floppy in left side) for saving the job. In figure 1, user can input the name of job, then click "Ent" for confirm. The job name will appear on the screen left top corner, figure 2.



After that, user can recall this job by clicking the "open" icon in the home screen (ch5.3, #4). The figure 3 screen of saved job will show up. Choose any one of the jobs, the job data will appear in the data preview screen. Then, user can go to run screen to operate.

On the other hand, the delete icon will not appear after a job is saved. For deleting the saved jobs, user needs to recall the job first, then delete it. The delete message will show up after click the delete icon.



# 5.11 Crease/fold position's stretch, shrink, forward, and backward

In the data preview screen, there are 4 buttons on right side: stretch, shrink, forward, and backward. When user needs to adjust the whole crease/fold data with similar rate, there 4 buttons can useful. The detail function of the 4 buttons is shown in below photo. The red lines of first row of Dumor icons are the original position. The green lines in second row of Dumor icons are the adjusted position.



### 5.12 Run screen



Click the run button in the data preview screen, the run screen will show up.

#	Name	Explanation
1	Home screen	Go back to home screen
2	Return	Go back to data preview screen
3	Speed	Machine running speed, total 5 level
4	Sheets	Machine stop after finish this number of sheets
5	Batch	Machine stop after finish this number of batch
6	Crease line	It shows what color (green) is the crease line in the diagram
7	Folding line	It shows what color (yellow) is the folding line in the diagram
8	Down	The feeding table will down to the lowest level
9	Test	Machine will run one sheet as a test
10	Run	Machine will continuous running

Note: If sheets and batch are 0, the machine will run out all paper in the feeding table. If sheets have number but batch is 0, the machine will assume there is 1 batch.

#### 5.12.1 Sheets number setting

Go to the run screen, the left bottom has a sheets icon, shown in the below figure 1 red circle. After click the sheets icon, there will be a number keypad. When sheets and batch is zero, the machine will keep running until feed table run out paper. When there is sheets number (such as 5 in figure 2) and batch is zero, the machine will stop after 5 sheets. However, when there is paper jam (or manual click the stop) during middle running, the sheets number will only count the finished sheets. And then, when user click run again, the machine will run remain unprocessed sheets. For example, if paper jam happen on the 3<sup>rd</sup> sheets, the sheet number will show 2/5. After user clean the paper jam and click run again, the machine will run 3 more sheets, and then stop.



#### 5.12.2 Batch number setting

In the run screen, click the batch icon (figure 1 red circle), the number keypad will appear. Then, input the batch number (such as 2 in figure 2). Click the run key, the machine will run the batch with sheets. In the figures example, the machine will run 2 batches and each batch runs 5 sheets, so total will be 10 sheets. If the machine stop in the middle, it will remain current count. Click the run will continuous the count, instead of starting from 0. It is same idea to the chapter 5.12.1's paper jam during middle running.



### **5.13 Folding unit keypad**

The folding unit's keypad is for background setting only, normal jobs can be operated on the display of crease unit.



#	Name	Explanation
1	Start	Run the machine (background setting only)
2	Test	Machine runs only one sheet for test
3	Stop	Stop the machine (background setting only)
4	Clear	Clear the data or clear the error display
5	Enter	After the data input, press it to confirm.
6	Numbers	Input data
7	Scroll up	Turn the page up
8	Scroll down	Turn the page down
9	Mode	Change the modes
10	Forward/Increase	When paper jams, press them to move rollers, so
11	Reverse/decrease	that the paper can be easily cleared
12	Indicator – No	This light will on if no paper during long running
	paper	time
13	Indicator –	It lighten when machine has problem
	Machine error	
14	Indicator – Paper	If the paper is jammed inside the machine, it lights
	jam	on
15	Indicator – Safety	If the safety cover is not well closed, this light will
	cover	on

# **5.14 Folding unit display**

When the machine is in ready situation, the screen in folding unit will show "Ready". In the below diagram, the "0/5" means sheets number for each batch. "0" means the number of processed sheets. "<" means the current folding type. "420" means the paper length.



In the ready mode, user can scroll up or down to check the current software version. In the below diagram, it is V1.01.



## 5.15 Setting screen

Click the setting button in the home screen, the system setting screen will appear as the follow photo. There are user mode, service mode, and recalibrate.

Select Mode, Please.		
User Mode		
Service Mode		
Recalibrate		
Exit		

Click the user mode, the follow screen will show up. User can change the machine's unit (mm or inch) and LCD light power. The Fan 1 or 2 are for active blowing fan 1 or 2. When using thin paper, user might need to turn off 1 of the 2 fan for stable feeding.

User	Mode			
	mm/inch	mm	Fan1	ON
	语言	English	Fan2	ON
	Lcd + Lcd -	80		
	Exit			

## 5.16 Hardware setting

#### 5.16.1 Sheet separator adjustment



In the above photo's red circle, turning the sheet separator switch clockwise will make the gap (in the diagram) smaller; counter-clockwise will make the gap larger. When there is double feed, please turn the switch clockwise to make the gap smaller; when paper cannot be fed, please turn the switch counter-clockwise to make the gap larger.

#### 5.16.2 Blowing air vent's gate adjustment

In the following photo, the red circle control the blowing air vent's gate (or the holes). It will affect the blowing air's power by changing the blow air's area. That means this switch does not directly control the fans power. For some cases, user might need to go to user mode (chapter 5.15) to turn on or off 1 of 2 fan, in order to feed paper stable.

For this switch, turning it clockwise will make the blowing air stronger; counter-clockwise will make the blowing air weaker. When using thicker or larger size paper, please turn on two fans (chapter 5.15). And turn this switch to maximum power (clockwise). When using thinner or small size paper, user might need to turn off 1 of 2 fans. And turn the switch counter-clockwise to get stable feeding.



#### 5.16.3 Suction fan power adjustment

The below photos show the suction fan power switch. First of all, turn the switch's lock counter-clockwise to unlock it. Turning the switch clockwise will make the suction fan stronger; turning the switch counter-clockwise will make the suction fan weaker. When using thicker or larger size paper, please maximum the suction fan power. When using thinner or small size paper, please lower the suction fan power for stable feeding.



#### 5.16.4 Folding rollers' gap setting

When using different thickness of paper, user needs to adjust the gap between folding rollers. In the blow diagram, there are two gaps, which need to be adjusted. Gap A is the lower folding knife's outfeed gap; Gap B is the upper folding knife outfeed gap. There are some suggested gap adjustment tables next to the diagram.



#### Remark:

The roller gap need to be adjusted when the stack thickness or fold type is changed. We must adjust it by insetting strips on the positions of 1, 2, 3, 4, as above pictures. What to insert should be referred to the following table.

For example: When we are doing Z fold with 250gsm, you firstly find Z fold ,you will find for position 1 and 2, there need no strips(\ means no need strips), for position 3 and 4, you need to set paper thickness of 0.1-0.15mm.

Fold Type		Thickness of Stack		Thickness of strip(mm)	
				1 2	3 4
Half	X.	128-157g	0.12-0.16mm	١	١
fold		157-200g	0.16-0.20mm	١	١
		200-250g	0.20-0.25mm	١	١
		250-300g	0.25-0.30mm	١	\
		300-350g	0.30-0.35mm	١	0.2-0.4mm
Letter		128-157g	0.12-0.16mm	١	١
fold		157-200g	0.16-0.20mm	١	\
		200-250g	0.20-0.25mm	١	0.1-0.2mm
		250-300g	0.25-0.30mm	0.1-0.2mm	0.2-0.3mm
		300-350g	0.30-0.35mm	0.3-0.4mm	0.5-0.7mm
Gate	-	128-157g	0.12-0.16mm	١	\
Fold		157-200g	0.16-0.20mm	١	/
		200-250g	0.20-0.25mm	١	\
		250-300g	0.25-0.30mm	١	0.1-0.15mm
		300-350g	0.30-0.35mm	0.1-0.2mm	0.1-0.2mm
Offset fold	67	128-157g	0.12-0.16mm	١	\
		157-200g	0.16-0.20mm	١	١
	Ver 1	200-250g	0.20-0.25mm	١	١
		250-300g	0.25-0.30mm	١	0.1-0.2mm
		300-350g	0.30-0.35mm	0.1-0.2mm	0.2-0.3mm
Double		128-157g	0.12-0.16mm	١	١
half		157-200g	0.16-0.20mm	١	١
dold		200-250g	0.20-0.25mm	١	0.1-0.2mm
		250-300g	0.25-0.30mm	0.1-0.15mm	0.2-0.3mm
		300-350g	0.30-0.35mm	0.3-0.4mm	0.5-0.8mm
Crease		128-157g	0.12-0.16mm	١	١
gate		157-200g	0.16-0.20mm	١	١
Fold		200-250g	0.20-0.25mm	١	١
		250-300g	0.25-0.30mm	١	0.1-0.15mm
		300-350g	0.30-0.35mm	0.1-0.2mm	0.1-0.2mm
Z fold		128-157g	0.12-0.16mm		
		157-200g	0.16-0.20mm		
	N.	200-250g	0.20-0.25mm		0.1-0.15mm
		250-300g	0.25-0.30mm	0.1-0.15mm	0.2-0.3mm
		300-350g	0.30-0.35mm	0.2-0.3mm	0.3-0.5mm

#### 5.16.5 Feeding table upper limit and skewing adjustment



In figure 1, the upper limit switch can adjustment the distance between suction belt and first sheet. Turning the switch clockwise makes the distance shorter (or called the feeding table goes higher); turning the switch counter-clockwise make the distance longer (or called the feeding table goes lower).



Side guide of the feeding table

Skewing adjusted level

Skewing adjustment switch

When the crease/folding line in the product is skewed (or it is not perpendicular to the side of paper), user can adjust the skewing adjustment switch to change the infeed angle for better result. In the figure 2, when turn the skewing adjustment switch downward, the side guide of the feeding table will move to operation side; turn upward will make the side guide to nonoperation side.

Note: usually, this side guide does not need to be adjusted, as long as the paper is in a good sharp that the corners are perpendicular.

#### 5.16.6 Installation of cross perforation bar (optional)



In the figure 1, when pull out the slide-in tool, please push the tool's locker to right (red arrow), then user can pull out the inside tool. Next, the perforation bar (or crease bar) can be push inside. The tool's locker will automatic lock the bar. Please make sure the bat is fully pushed inside the machine, otherwise, the machine will show error message.

Note: For perforation bar, please make sure the white plastic paper deflector faces the feeding table. Then, the crease depth setting in paper data setting screen might need to change, depends on situation.

On the other hand, in the outfeed area, there are several outfeed lags wheels (shown below diagram). They avoid outfeed skewing.



However, the wheels will pressure the perforation line and make a mark on the paper, which is shown in following photos. There are about 6 marks on each perforation. The red rectangle shows the first mark on each line. Those effects are unavoidable.



Below photo shows a zoom-in view of the mark.



For replace the perforation bar's buffer pad, please follow below steps.



### **Chapter 6 Maintenance**

Maintenance is important for machine. Essential maintenance is in favor of use life and efficiency of machine. It consist of user maintenance and technician maintenance.

User maintenance

After long term usage, the internal of machine will be covered by dust. Those dust will affect the operation, so operator has to clean the parts in a period. The period will be vary by usage, environment, or weather. There are two mainly cleaning: 1<sup>st</sup>, clean the roller with wet cloth; 2<sup>nd</sup>, clean the sensors with air gun or cotton swab.

Meanwhile the working environment must be clean and dry, as well as no light shining directly.

Technician maintenance

The technician maintenance regularly is also very important. It mainly finished by technician, including checking the wear and tear parts, replace the broken parts, adding lubricant.

#### 6.1 Clean the sensor

As the following photos, please clean the red circled sensor when needed.



#### 6.2 Clean the rollers

Dust or ink from paper might stick on rollers that reduce the friction of the rollers and make error, for example: crease line is out of tolerance; or folding line is not on crease line.

Therefore, please clean the rollers if needed.

### Warranty & Incorrect Use

#### IMPORTANT INFORMATION

Your MCPF-35 should reach you in perfect condition and is guaranteed for 1 Year from date of purchase covering defective parts and general wear and tear, this does not cover film jams, misfeeds or other operator related errors, which would be chargeable. Your MCPF-35 is covered against manufacturing defects, it does not cover against any damages caused by misuse.

Your warranty will be void if the system has been modified by a third party not approved by the manufacturer (Vivid Laminating Technologies) to carry out such alterations.

E&O.E

