



# SCP 33

## Auto Creasing and Perforation



## Operation Manual

Please read this manual carefully before operating the machine

Revision : 16/08/22



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# 1. SAFETY RULES

The machine has many safety features which make it a safe to operate. Regardless of your experience, safety instructions must be read carefully, completely understood, and applied to your daily work habits. If you do not understand or are confused by certain safety instructions presented in this manual, discuss them with your supervisor. Machine setup, cleanup, and maintenance operation will vary. Therefore, it is essential all employees to practice safe work habits. **SAFE WORK HABITS PREVENT INJURIES.** The main rule to follow is to **ALWAYS** make sure the main drive is **STOPPED** and **LOCKEDOUT** when performing setup, cleanup, adjustment and maintenance operations.

The safety precautions in this manual provide guidelines for the protection and for that of fellow workers.

## 1.1 Precautions

Before any maintenance is performed on the machine, switch off all sources of electrical; do not operate the equipment when panels and safety covers are not in place. Failure to observe this warning could result in personal injury.

## 1.2 Avoid Accidents

Most accidents are caused by the failure of some individual to follow simple and fundamental safety rules and precautions. For this reason, most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs. With any machinery, a careful and trained operator is the best insurance against an accident.

## 1.3 Safety Issues & General Safety Rules

DO	DO NOT
1. Read and understand this manual before attempting to operate or service the machine.	1. Do not attempt to operate or service the machine without reading and understanding this manual.
2. Be familiar with the machine safety rules and practices.	2. Do not remove the safety devices.
3. Warn others of an intended action that may endanger them.	3. Do not clean or lubricate moving parts of a machine that is running.
4. Perform lubrication and oiling of the machine only when power is off.	4. Do not unauthorized persons to operate the machinery.
5. Verify that all guards are installed before operating the machine.	5. Do not place tools on a machine that is running.

<p><b>6. When working on electrical equipment, power must be shut off to all circuits before any work is attempted. Individual switches must be opened and the equipment circuits tested to make sure there is no power.</b></p>	<p><b>6. Do not reach into the machine to make adjustments while it is running.</b></p>
<p><b>7. Be sure all operators are aware of all areas and operations that require extra safety measures.</b></p>	<p><b>7. Do not allow horseplay in the work area</b></p>

## **1.4 AC Supply**

**1.4.1 Voltage steady state voltage: 0.9 to 1.1 of nominal voltage.**

**1.4.2 Frequency 0.99 to 1.01 of nominal frequency continuously; 0.98 to 1.02 for short time.**

**1.4.3 Harmonics distortion not exceeding 10% of the total r.m.s. voltage between live conductors for the sum of the 2<sup>nd</sup> through to the 5<sup>th</sup> harmonic.**

**1.4.4 Voltage Interruption Supply interrupted or at zero voltage for not more than 3ms at any random time in the supply cycle with more than 1 s between successive interruptions.**

**1.4.5 Voltage dips not exceeding 20% of the peak voltage of the supply for more than one cycle with more than 1 s between successive dips.**

## **1.5 General Physical Environments**

**1.5.1 The minimum requirement for all electrical equipment is correct operation between air temperature of +5° C and +35° C.**

**1.5.2 Electrical equipment is capable of operating correctly when the relative humidity does not exceeding 50% at a maximum temperature of +45° C.**

**1.5.3 Electrical equipment is capable of operating correctly at altitude up to 1000m.**

**1.5.4 Electrical equipment is designed to withstand to protect against the effects of transportation, and storage temperature within a range of -25° C to +55° C and for short periods not exceeding 24 hours at up to +70° C.**

**1.5.5 Avoid exposing to vibration environment.**

**1.5.6 Avoid exposing to direct sunlight or heat rays.**

**1.5.7 Have to connect to the factory grounding system correctly.**

**1.5.8 Away from electric magnetic interference source sites, such welding, discharge machine.**

## 2. SPECIFICATIONS

Specification	Description
Feeder system	Auto Upper Suction
Feeder capacity	100mm
Minimum size	210X140mm
Maximum size	330X3000mm
Paper stocks	Creasing: 70~700 gsm, perforating: 70~350 gsm
Minimum crease distance	1mm
Minimum crease from lead margin	1mm
Speed (one crease on A4 paper)	5000sheets
Accuracy	±0.2mm
Quantity of crease in one pass	32
Counter	Yes
Skew adjustment	±0.2mm
Crease depth adjustment	Adjustable
Blow adjustment	Adjustable
Paper separator adjustment	Adjustable
Feeding tray	630mm
Eject stacker	480mm
Power	230VAC 50/60Hz
Consumption	700W
Dimensions (H x W x D)	540x1280x600mm
Weight	70Kg



Paper Creasing Machine

230V 50/60Hz 700W

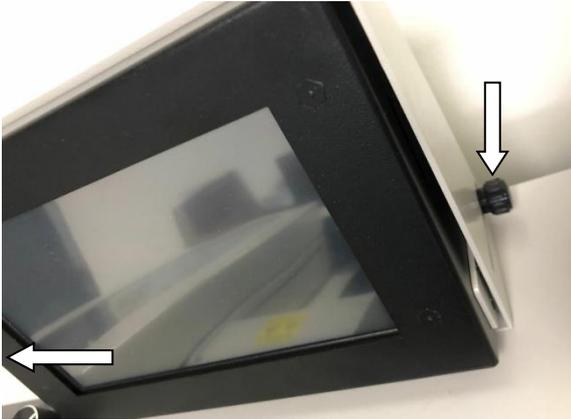
S/N:SCP33.200.236



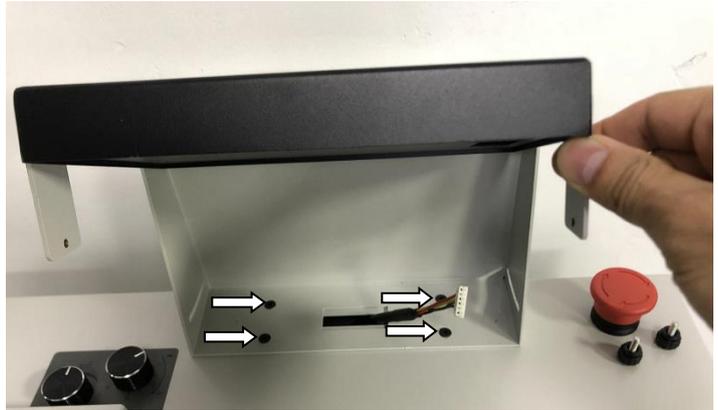
**Note: A dedicated AC power line is required.**

### 3. INSTALLATION

#### 3.1 Install the touchpad for the machine.



Step 1: Remove 2 knobs of the touchpad.



Step 2: Tighten 4 screws to fix the touchpad on the machine.

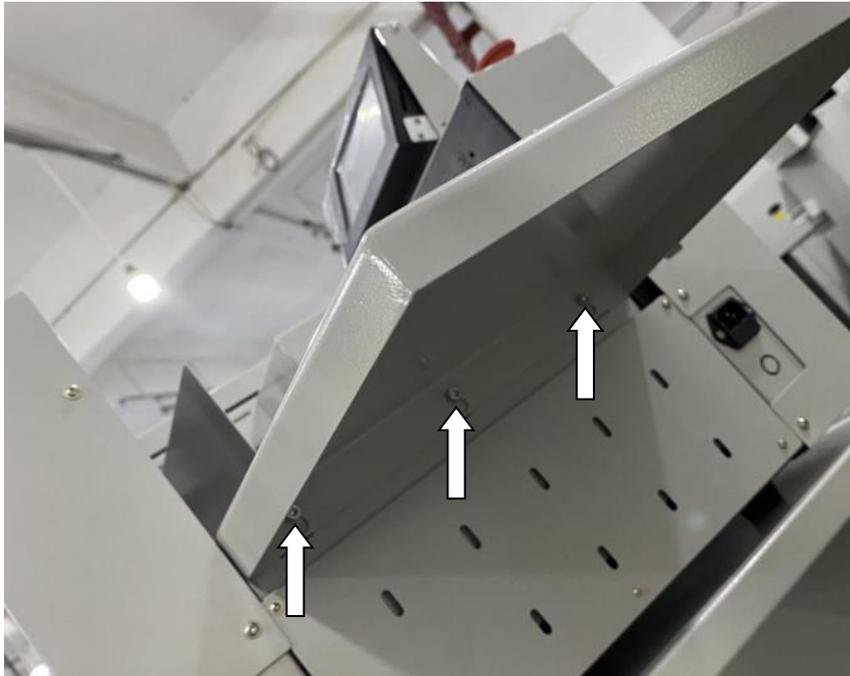


Step 3: Plug the communication cable into the touchpad.

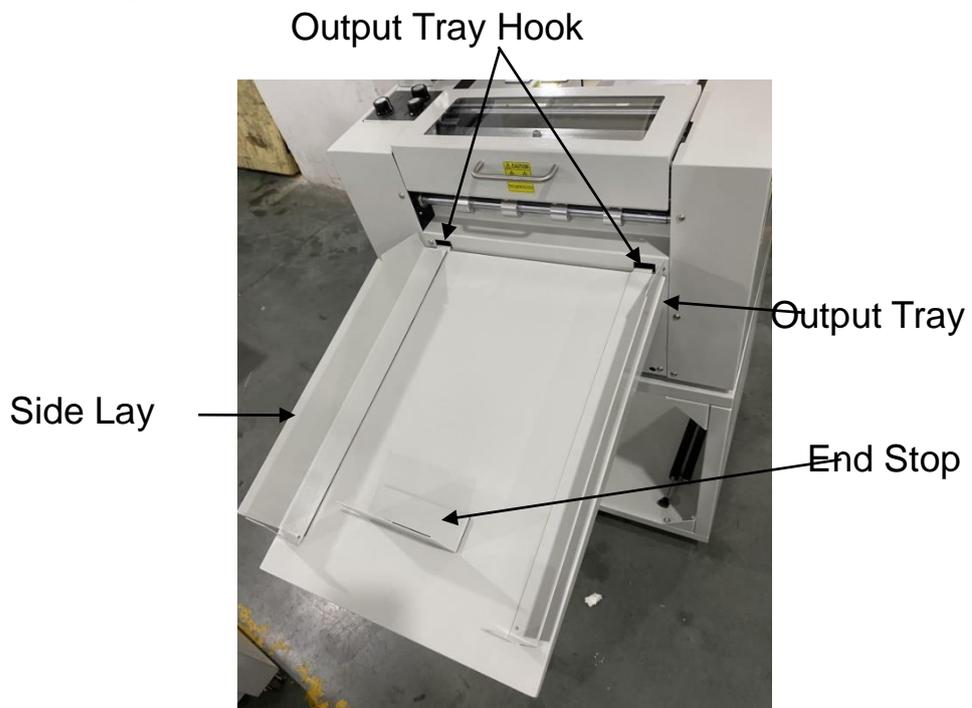


Step 4: Put the 2 knobs to the touchpad.

#### 3.2 Use 3 screws to fix the extension table to the loading table.

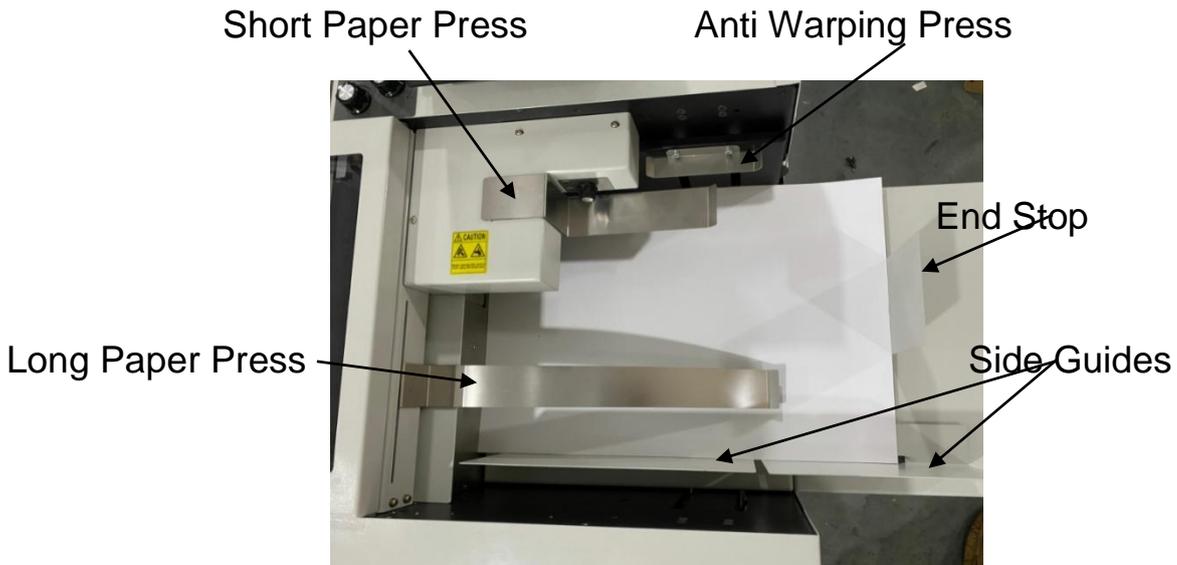


3.3 Output tray.



The side lays and the end stop should be adjusted according to the ejecting situation.

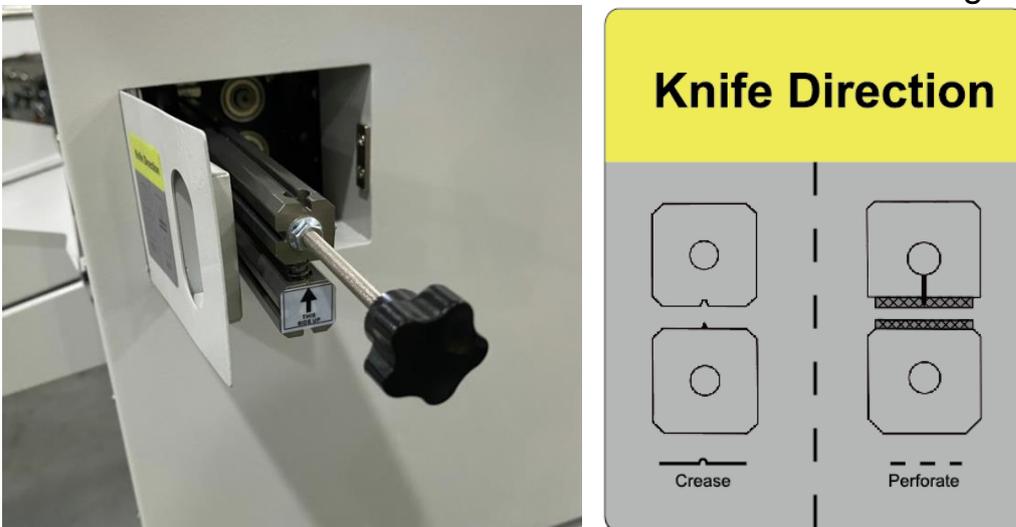
### 3.4 Paper press & guides.



The side guides should be on proper position to hold the paper stack. The paper press is used to hold the paper on the top to avoid feeding failure as the top paper is flowing up by the blow flow. To get a smooth feeding, the blow flow, separator gap and stack height should be adjusted in cooperation.

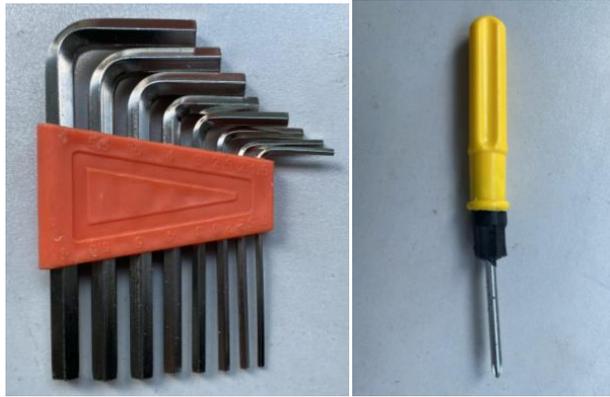
### 3.5 Installation of Blade

Open the blade gate. Push the blade all the way into the machine. The installation direction refers to the label on the blade gate.



## 4. ACCESSORIES

### 4.1 Tools.



### 4.2 Pad for perforating blade.



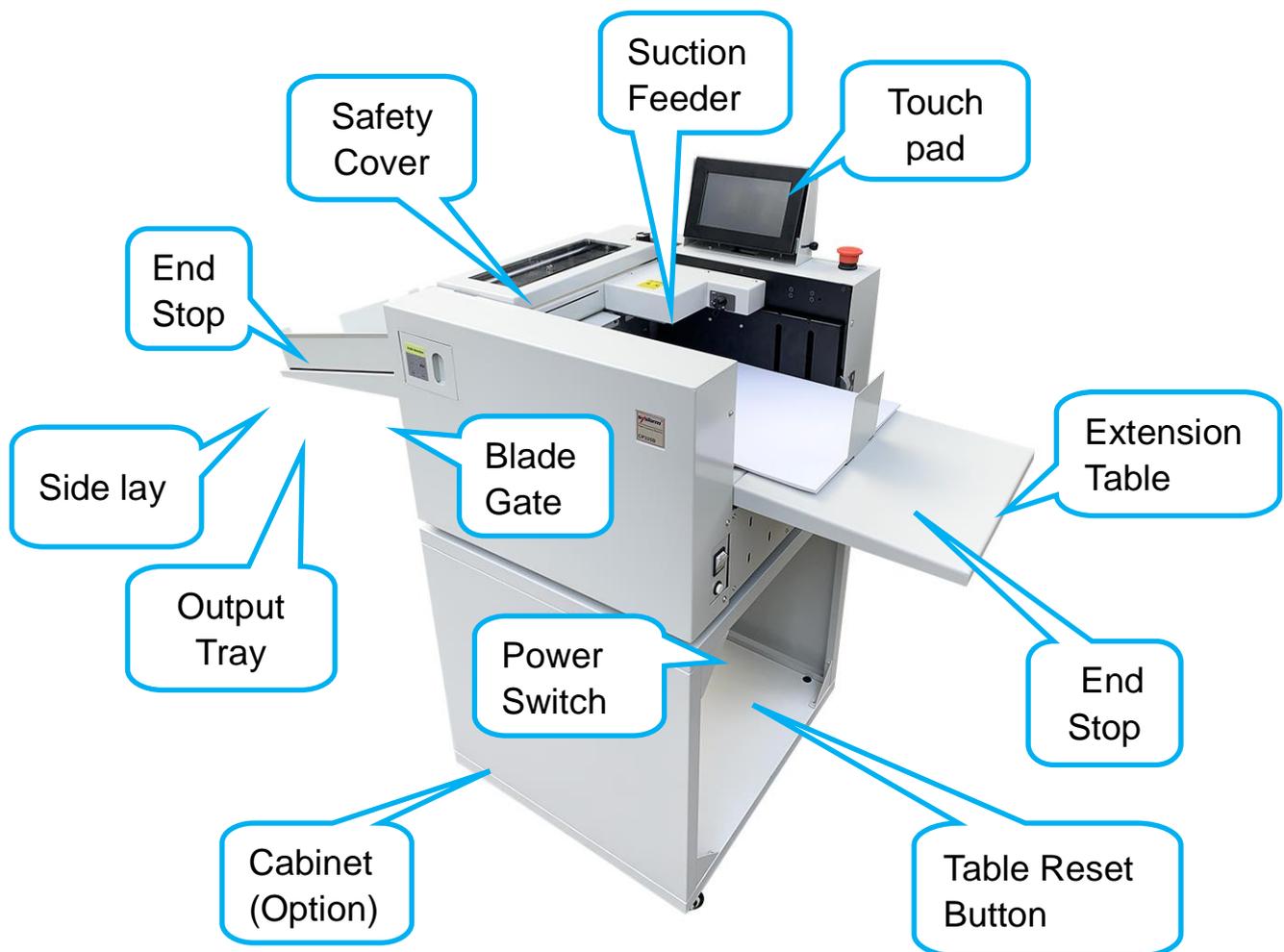
### 4.3 Separator Plate.



#### 4.4 Spring for elevator.



### 5. KEY COMPONENTS



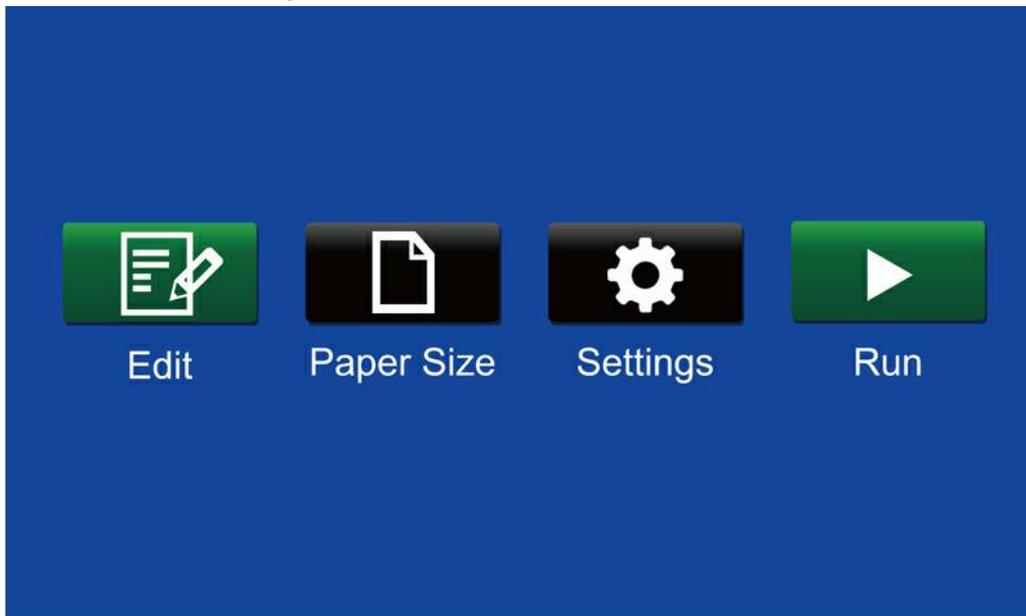
- Notice: Press the table reset button to reset the table when the screen is showing lift errorreferringto the item 13.10 !

## 6. START-UP

### 6.1 While Machine is Off

6.1.1 Press the main power to on "I".

6.1.2 Main screen is showing.



## 7. PAPER SIZE SETTINGS

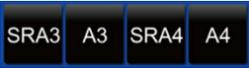
**7.1 It helps the system to calculate the working parameter. Make sure the paper size is set properly before editing crease data or processing another size paper.**

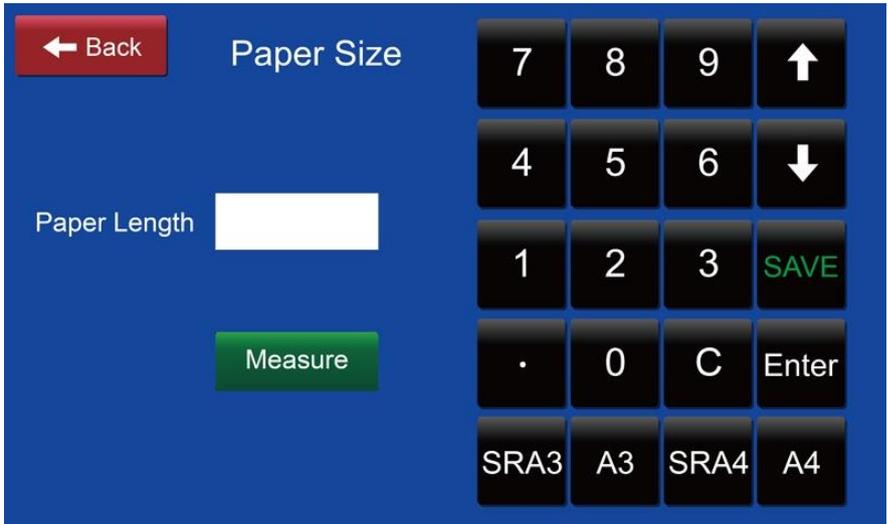
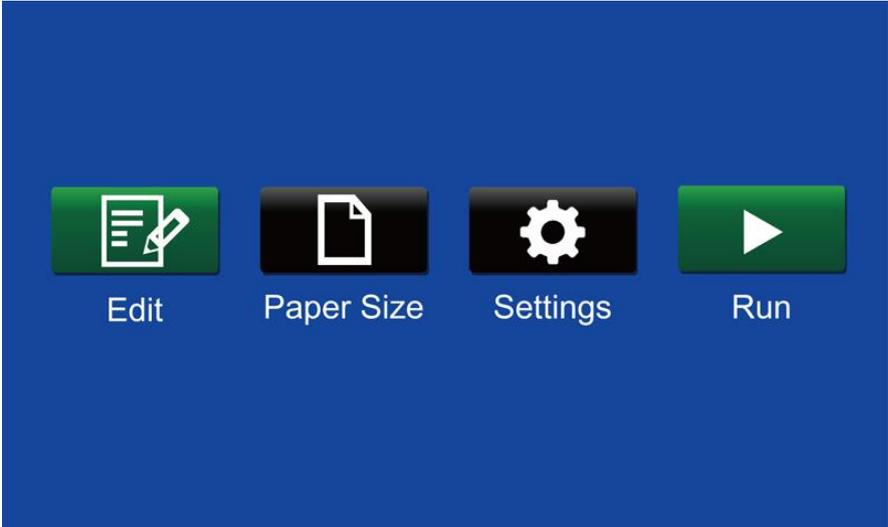
Tip on the blank box then enter the figures from the keypad. The range of the figure is from 0.0-2999.9. Press  to set into memory.

7.2. Auto measurement of paper length: Press , the machine will be running slowly then pass a paper without crease. When the paper ejects, the actual paper length will be showing on the box. Press  to set into memory. Press

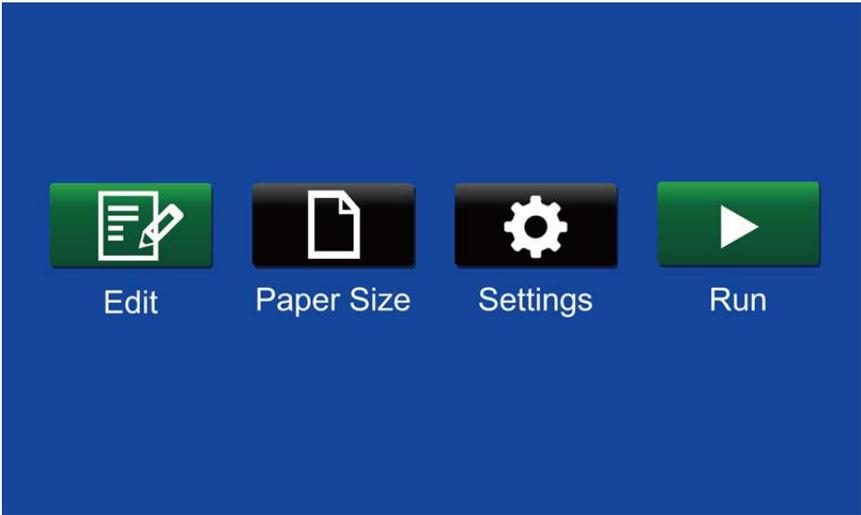
 again will end the current measuring.

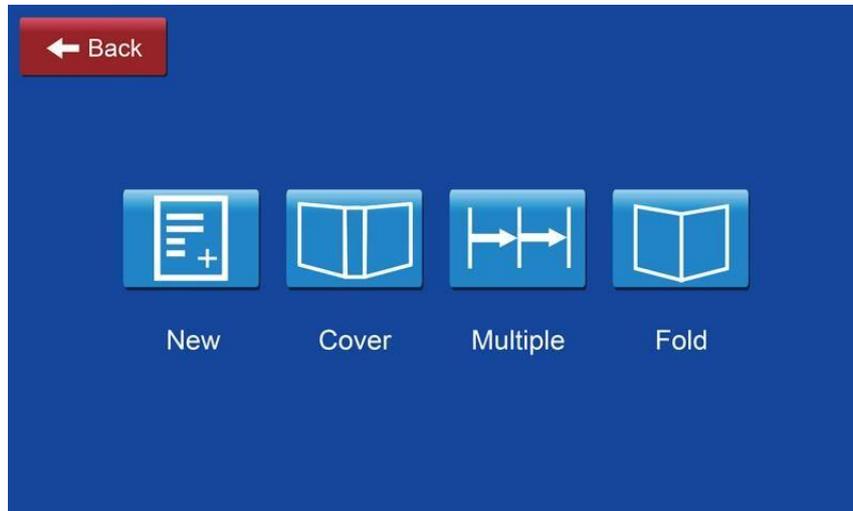
7.3. Standard paper SRA3, A3, SRA4, A4 can be chosen directly by press this 4

Icon  individually. Press  to set into memory.



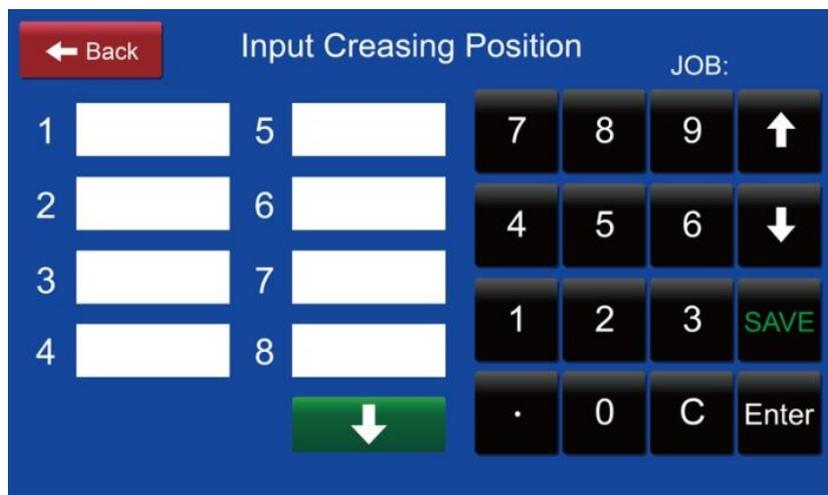
## 8. EDIT CREASE DATA





8.1. Manual input: Press  then press  or  to choose the job No..

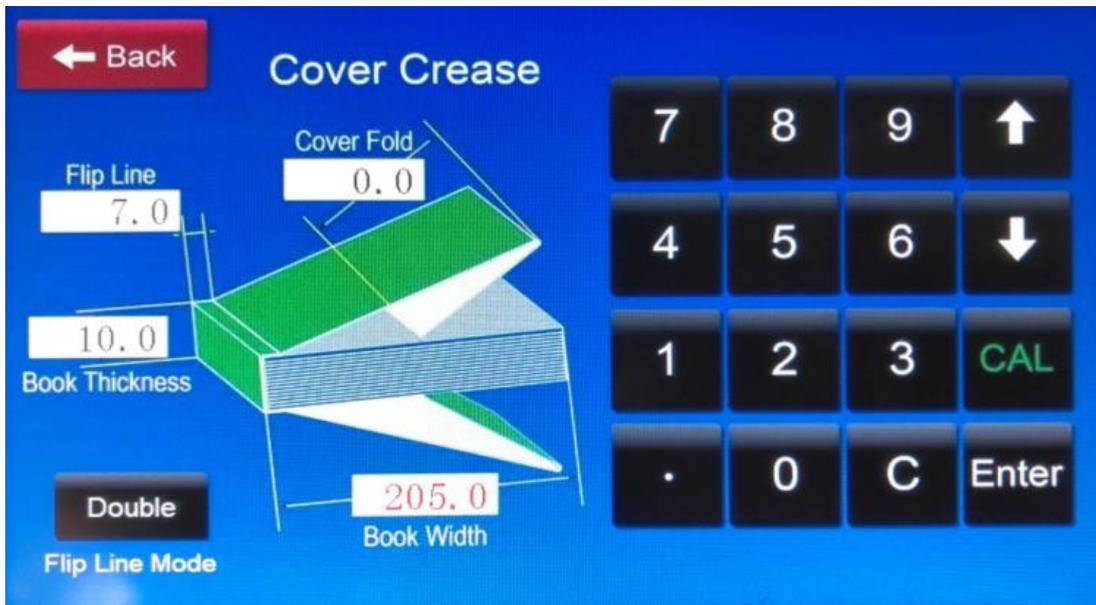
Tip on the blank box then enter the crease position from the keypad. The measurement is from the feeding edge to the creasing position. Press  to set the whole job data into memory. 32 position data can be processed in one pass once.



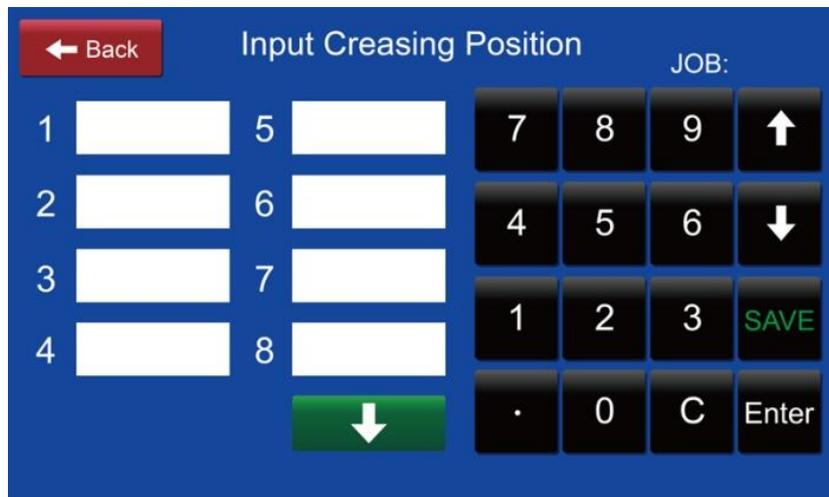
8.1.1 **Open a define job:** Access the manual input interface then press  or  to choose the job No.. Press  to recall the defined crease data to show on the screen. The data can be modified here. Press  to set the whole job data into memory.



8.2. Cover crease: Press  then tip on the blank box then enter the figures referring to the below illustration.



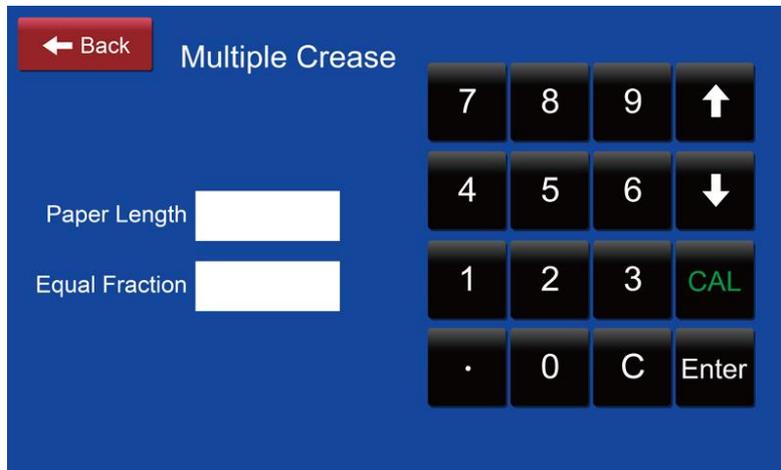
After finishing settings then press  to transfer the settings to crease data.



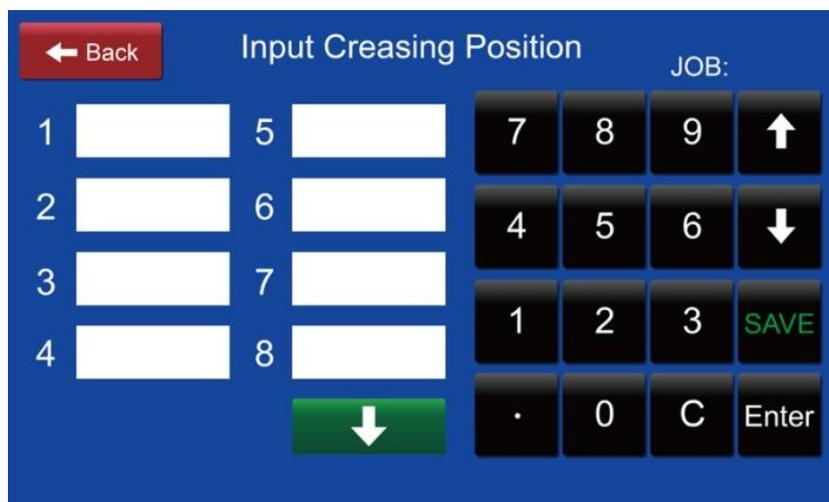
Press  or  to choose the job No.. Press  to set the whole job data into memory.



8.3. Multiple crease: Press  then tip on the blank box then enter the paper length and the equal fraction.

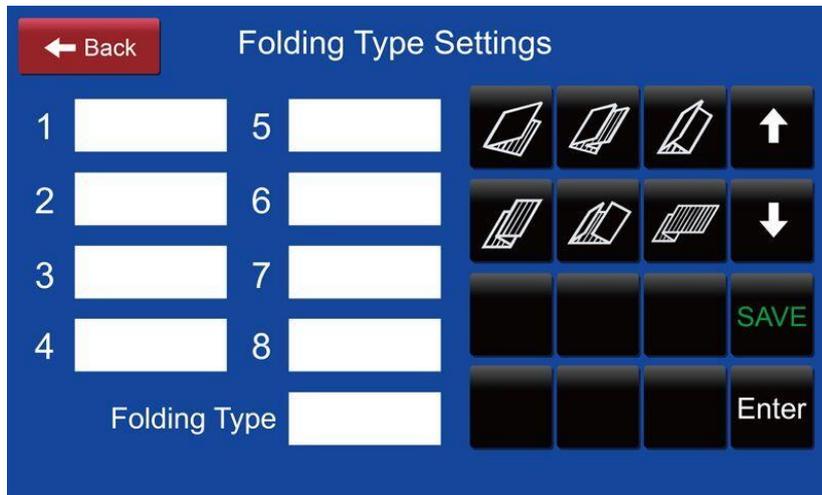


After finishing settings then press  to transfer the settings to crease data.



Press  or  to choose the job No.. Press  to set the whole job data into memory.

**8.4. Standard folding:** Press  then choose one standard folding type.



Six standard folding types are available as shown below.



No. 1: Single fold,



No. 2: Double fold



No.3: Letter fold



No.4: Accordion fold



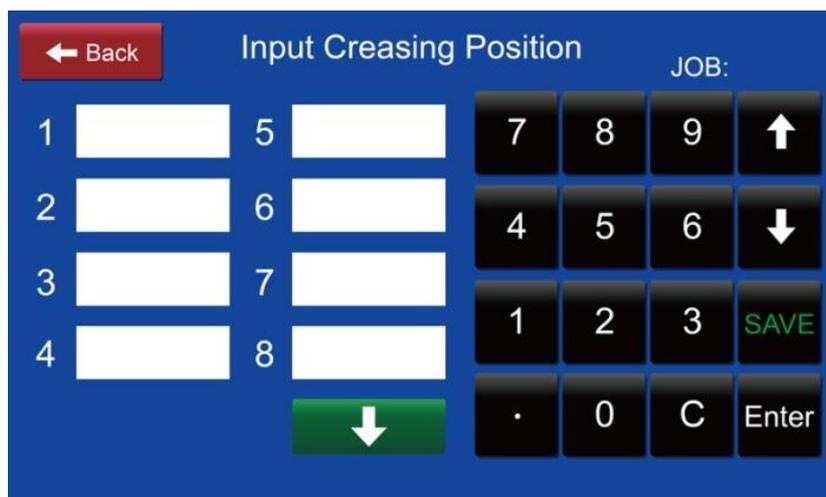
No.5: Brochure fold



No. 6:

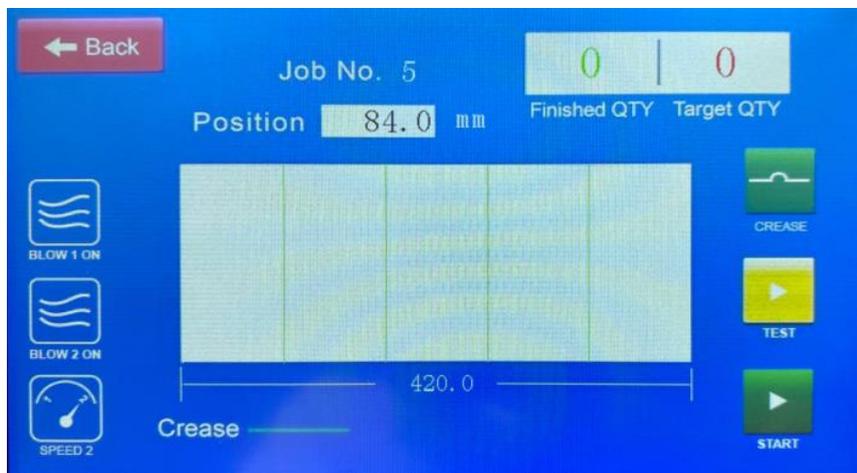
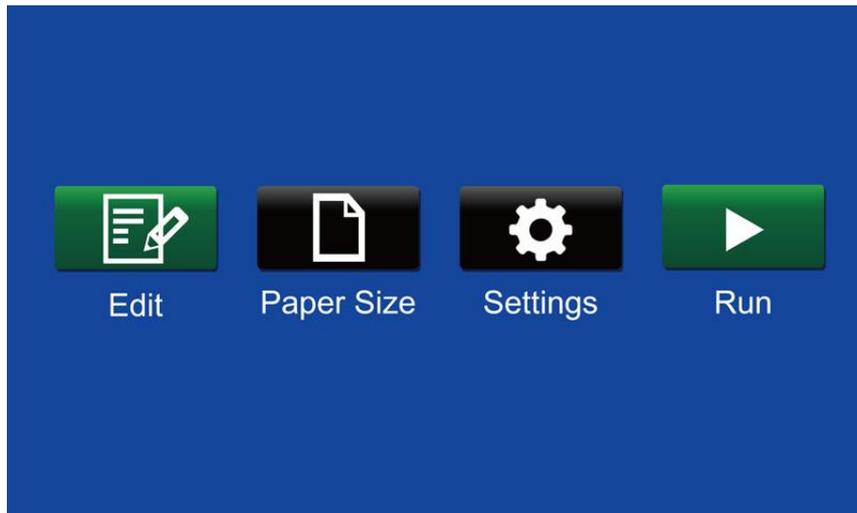
Irregular accordion fold

After choosing one standard folding type, press  to transfer the settings to create data.



Press  or  to choose the job No.. Press  to set the whole job data into memory.

## 9. RUN A JOB



9.1 Press  to get into the running job interface.

9.2 Tip on the Job No. figure. The keypad will pop up. Enter the job no. from the keypad then press  to active the job.



9.3 Tip on the target QTY box. Enter the desired processing quantity of sheets then press . If target QTY is set 0, the machine will feed sheets continuously.



9.4 Press  to choose the running speed. 2 ranges are available. 1 is low speed and 2 is high speed.

9.5  is showing blowing fan status. Press the icon to switch on/off the blowing fan according to the requirement.

9.6  is showing that the machine is in normal creasing mode. If to process thick papers or make perforation job, press the icon to switch the machine to

perf/thick mode . Choose  to set the machine in manual feeding mode

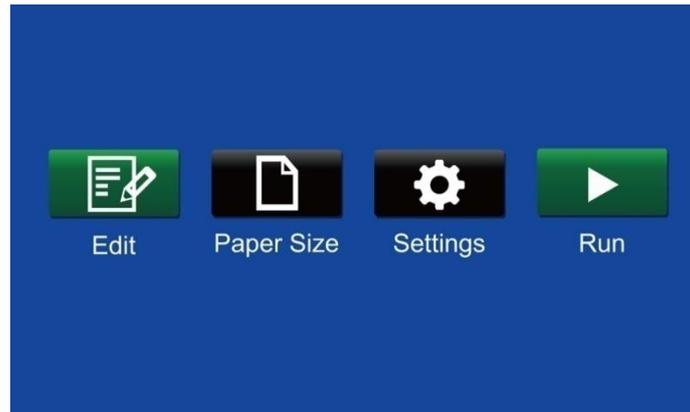
and the separator needs to be set at the lowest position. Choose  to set the machine in feeder mode. In the feeder mode, the machine is feeding paper only without crease function and it needs an optional special conveyer.

9.7 Press  and the machine will process one pass to check if the machine can run the job properly Press  to end the current processing.

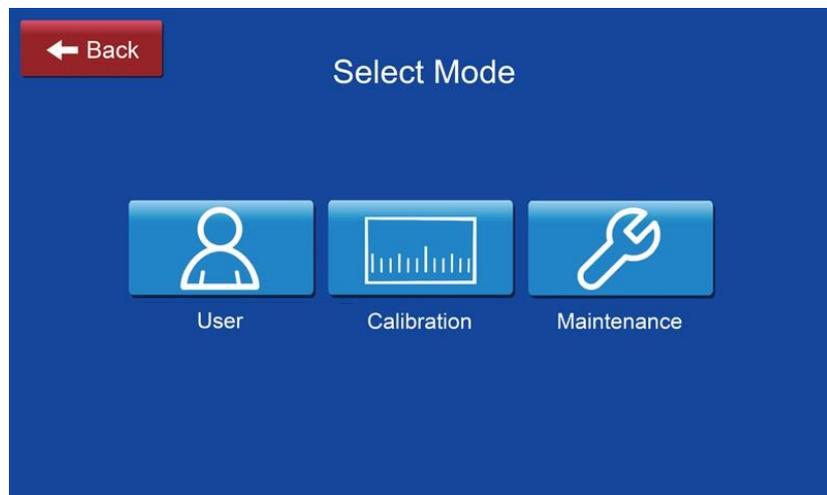
9.8 Tap on the finished QTY box to reset the counter of the finished quantity of sheets. If the counter is full, press  the counter will reset automatically.

9.9 Press  to start processing the current job. Press  to end the current processing.

# 10.SETTINGS



10.1 Press  to get into the settings interface.

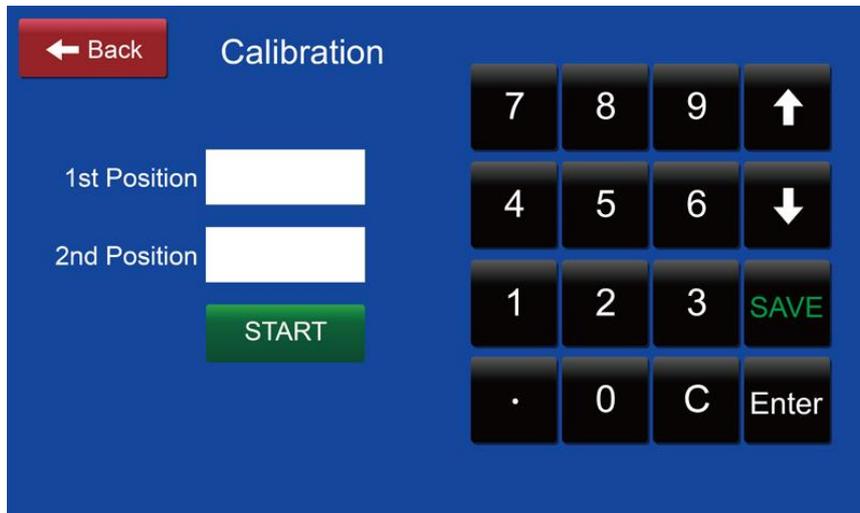


10.2 User mode: Press  to choose the metric or inch unit.

Press  to set back light. The range of the backlight setting is from 0 to 100.



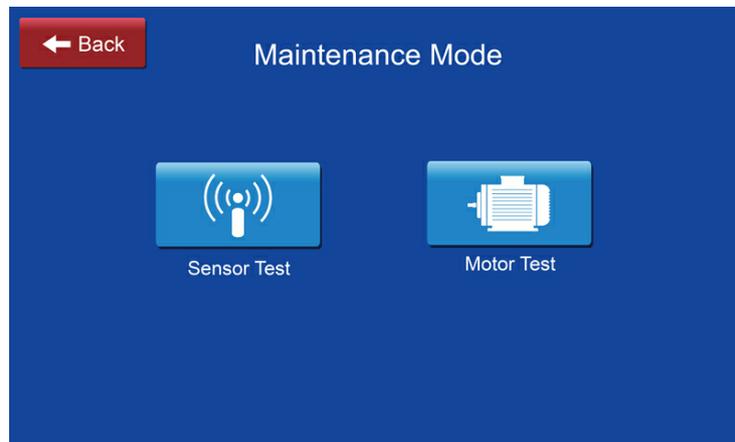
10.3 Press  to get into the measurement calibration.



Press  then pass one A3 paper. Measure the two position and enter the actual measurement in the related boxes. Press  to set into the memory.

Press  again will end the current running.

10.4 Maintenance mode: in this mode, the sensor can be checked their status and the motors can be tested.

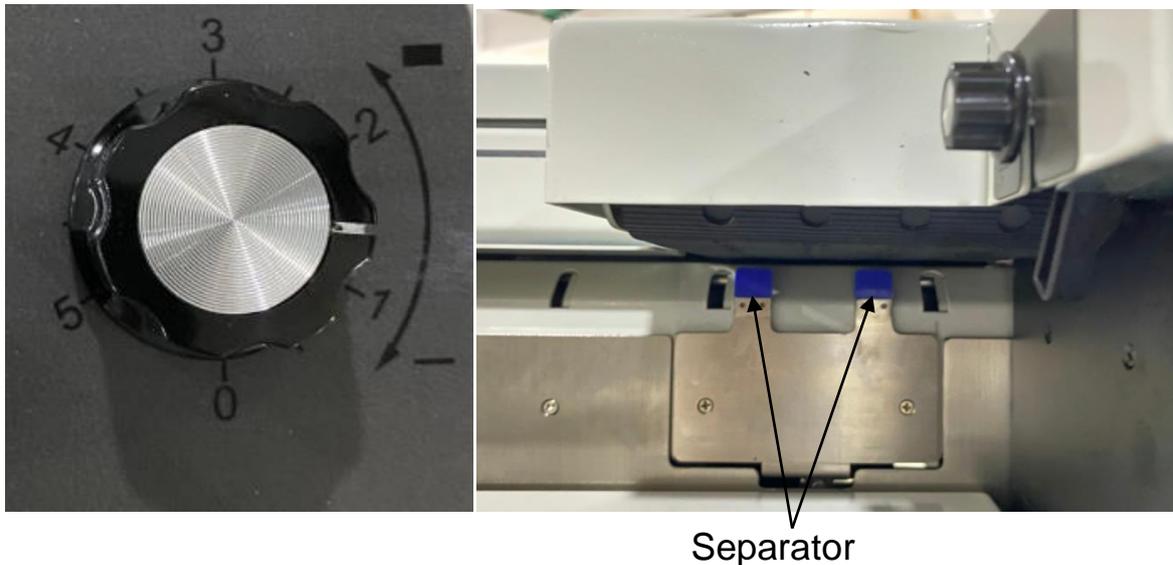


10.5 System settings: these settings are factory parameter setting. Usually users do not need to care about these settings.

## 11. ADJUSTMENT

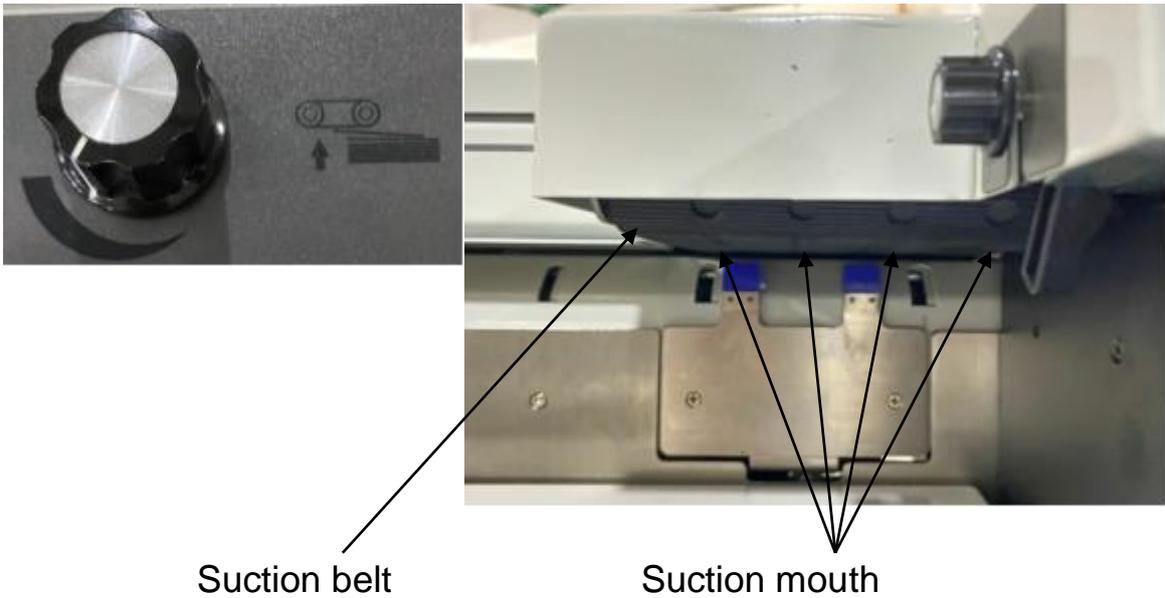
### 11.1 Separator Gap

11.1.1 Turn the knob to correct double feed or feed failure. Turn clockwise to make the separator gap small and turn counter-clockwise to make it large.



### 11.2 Suction

11.2.1 Turn the knob so that the air suction changes. Depend on paper type and feeding situation to adjust it. Turn clockwise to make the suction strong and turn counter-clockwise to make it weak.

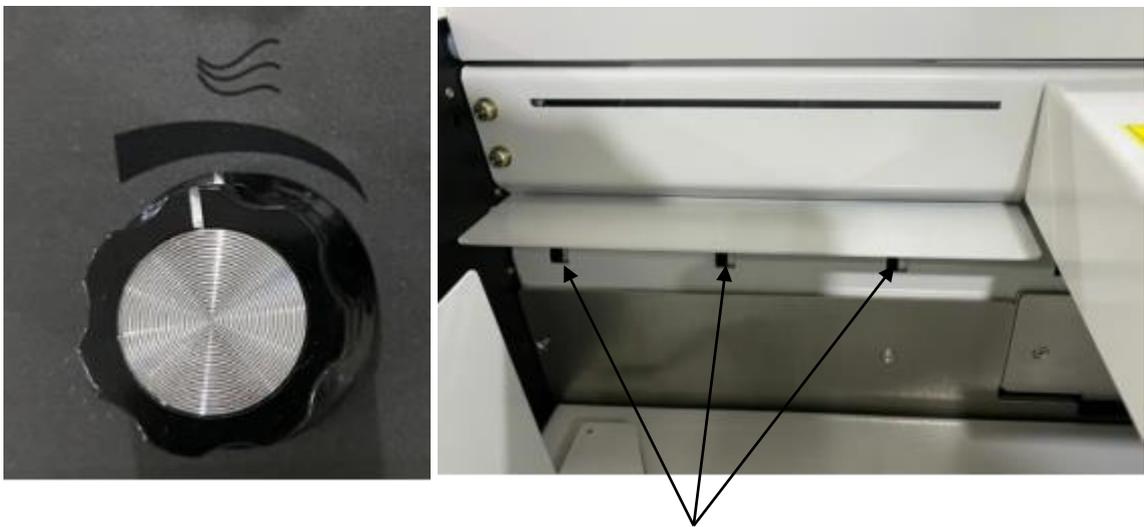


Suction belt

Suction mouth

### 11.3 Blow Flow

11.3.1 Turn the knob so that the air gate change. Depend on paper type and feeding situation to adjust blow flow. Turn counter-clockwise to make the blow flow strong and turn clockwise to make it weak.



Blowing mouth

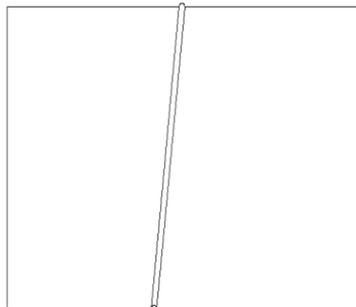
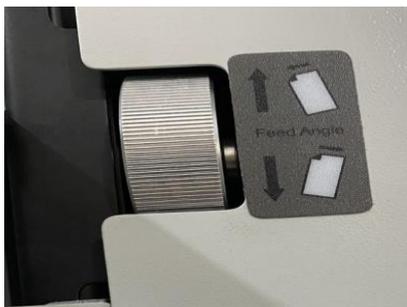
### 11.4 Stack Height Sensor

11.4.1 Depend on paper type and feeding situation to adjust it. Turn clockwise to make stack go higher and turn counter-clockwise to make stack go lower.



### 11.5 Creasing skew

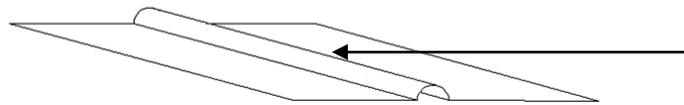
11.5.1 Turn the knob to adjust the feeding angle as shown in the illustration so that the crease or perforation skew is be corrected.



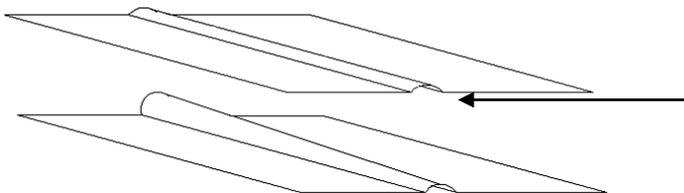
### 11.6 Creasing Depth

11.6.1 Creasing depth is important to crease quality. It depends on the gap between upper die and lower die. Creasing depth should be adjusted according to paper thickness.

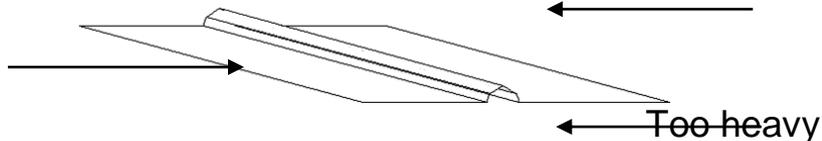
Normal



Too light



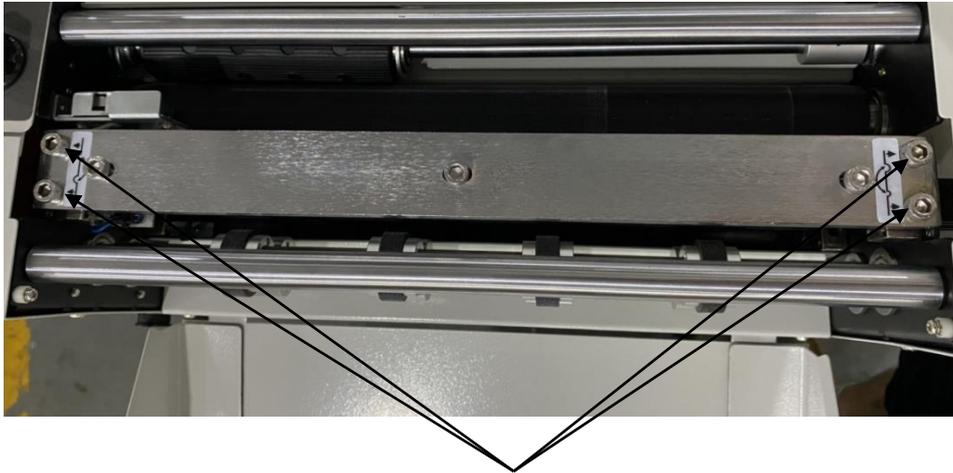
Not balance  
Crack edge



11.6.2 To adjust the creasing depth, open the top cover and 7 Allen screws on the bar.

**The 3 screws in the middle of the bar are factory setting. Do not adjust them. The 4 screws on both sides for depth adjustment.**

Depend on paper type and feeding situation to adjust it. Turn clockwise to get a deeper crease and turn counter-clockwise to get a shallower crease.



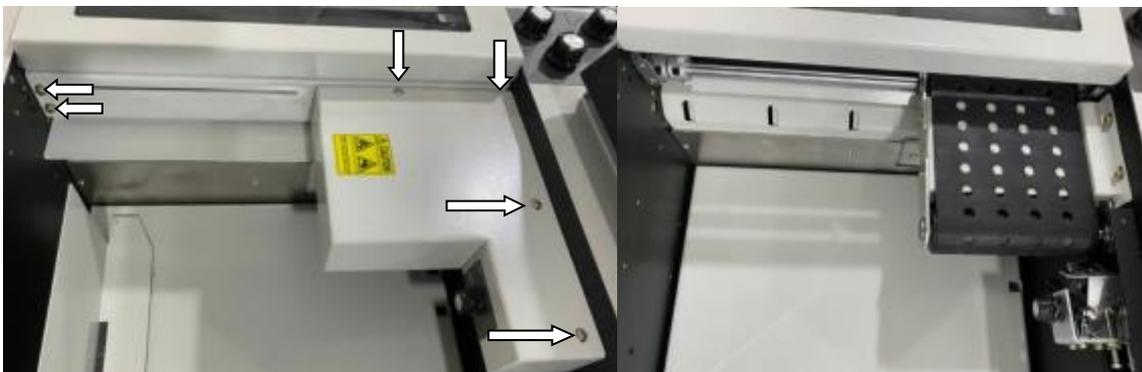
4 Creasing depth adjusting screws

## 12.OPTIONAL TOOLS

### 12.1 Small feeder

12.2.1 The machine can use a small feeder to process the smallest size paper 45x90mm size paper as a business card size. The regular configure is a A4 size feeder. Change a A4 size feeder to a small feeder as following steps:

12.1.2 Remove 6 fixing screws to remove the cover of the feeder and the front fender.



12.1.3 Remove the 2 fixing screws for the coupling. Move the coupling to the right.

Remove the 2 fixing screws for the A4 feeder then take away the A4 feeder form the machine.

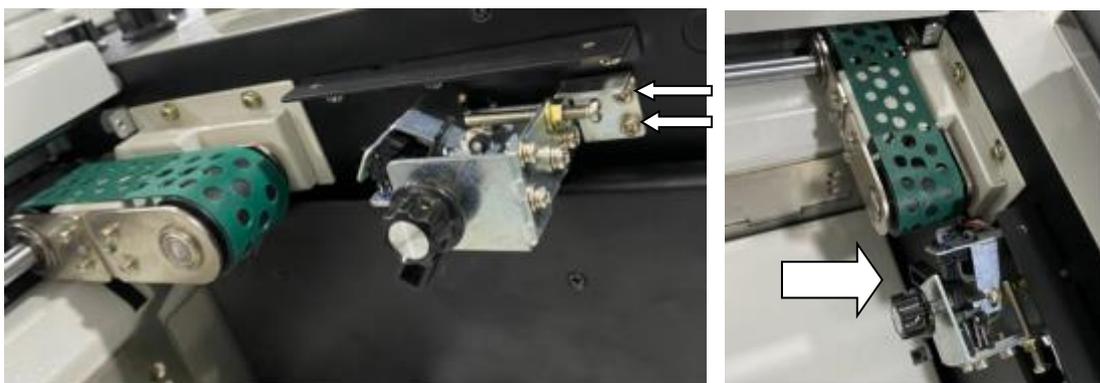
12.1.4 Remove the 2 fixing screws for the separator and change it to a special separator with a single separating pad.



12.1.5 Install the small feeder then screw up its coupling.



12.1.5 Remove 2 fixing screws for the upper sensor assembly then move it forward and screw it up.



12.1.6 Install the special funder and cover for the small feeder. Set the small side



guides.

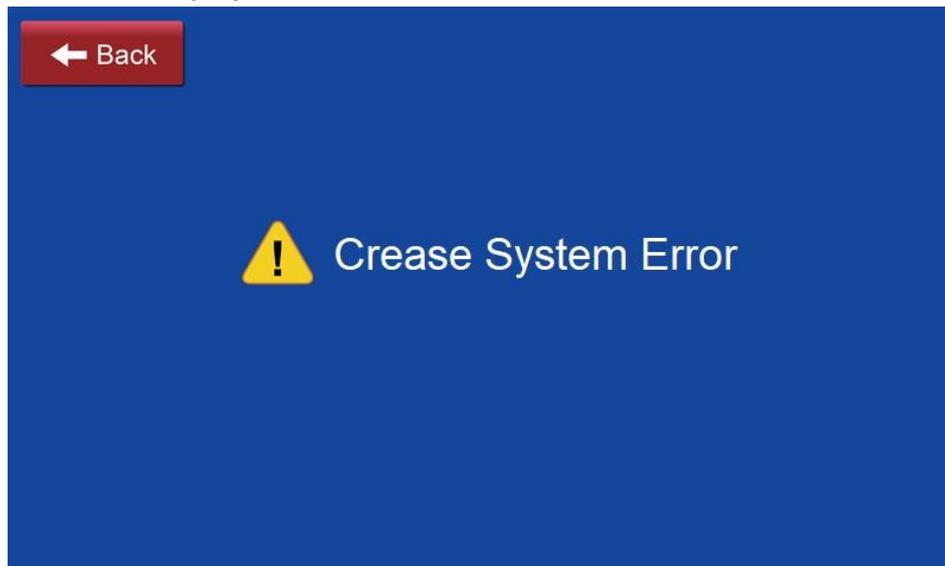
## 13. TROUBLE SHOOTING

### 13.1 Crease system error/Jamming the blade

13.1.1 Feed too many papers in one pass.

13.1.2 Set the blade too low.

13.1.3 Run the thicker paper than the blade are set for



#### Solution:

1. Carefully use the scroll buttons to move the rollers and pull the paper out, find the every reason and solve it accordingly.

2. If above doesn't work, please uninstall the unit, and test the machine from the beginning.



### 13.2 Paper jam

13.2.1 The paper is too thin ( under spec, the paper will crumple ).

13.2.2 There is some waste present in the pass path of the machine.

13.2.4 There is too much ambient light shining on the IR sensor ( especially direct sunlight or neon light which will send fake paper jam signal).

13.2.5 The leledge of the paper is being damaged by the paper separator.

**Solution:**

Use the scroll icon to control the roller manually to drive the jammed paper out of mechanical system do not pull hard on the paper, or you may damage the in-feed rollers !



**13.3 Double Feed**

13.3.1 The separator gap is too large.

13.3.2 The blow flow is too strong.

**Solution:** Turn their knobs to get a proper adjustment.

**13.4 Bubbling in laminated stock**

13.4.1 This occurs if you try to crease laminated paper. The curve of the crease will not adhere to the film

**solution:** Make a shallower crease or use a better film.

**13.5 Paper wrapped around the perforating wheels**

13.5.1 This occurs if the card is too thin/ has no body and will get hooked on the perforating teeth and wrap around the disc.

**solution:** keep the paper within the spec..

**13.6. Wear on the rollers**

**Solution:**

1. Replacement.

**13.7 Feed skew**

**Solution:**

1. Check if the paper is out of specification or not guided properly. Set the side guides and paper press properly.

2. Turn the feed angle knob to adjust it.

### 13.8 Coating on the rollers

13.8.1 The rollers will accumulate the coat from the passing paper and this will reduce the friction significantly and cause sliding.

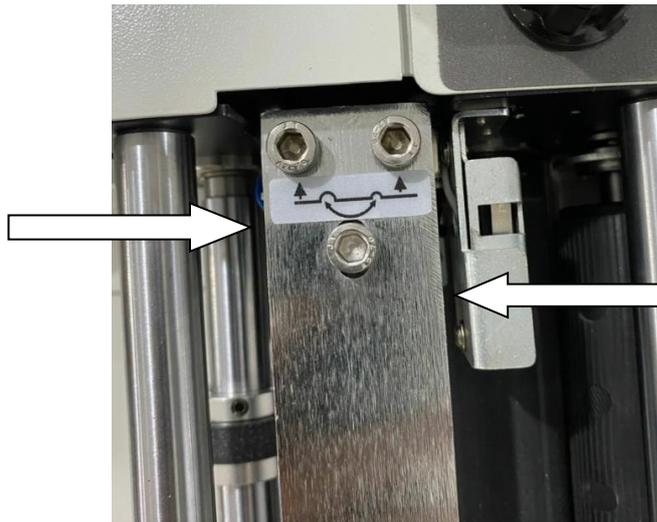
#### Solution:

1. Clean out with water or alcohol.

### 13.9 Measurement is not accurate

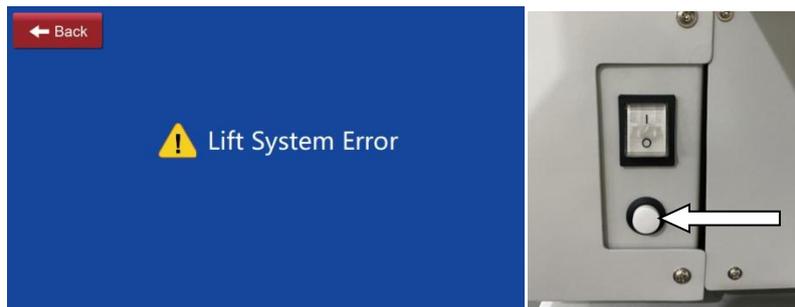
#### Solution:

1. Clean out the upper & lower feeding sensors.



2. Calibrate the measurement in the system according to the above item 10.3.

### 13.10 Lift motor error



1. The table does not go down

#### Solution:

Switch off the machine. Press the table reset button and hold then switch on the machine. Release the table reset button when the table is going down.

2. The table does not go up when pressing



## Solution:

Switch off the machine. Press the table reset button and hold then press



. Release the table reset button when the table is going up.