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**Value !  
Quality !  
Innovation !**

# AEROCARD-STRIKE



## USER MANUAL



## AEROCARD STRIKE INSTRUCTIONS

Thank you for purchasing the **AEROCARD-strike** finisher.

This unit is a precision piece of machinery; therefore please read the manual carefully and the machine will give you trouble free service.

The machine is complex with many functions, therefore we recommend reading the manual several times and doing several dry run setups with re-used paper before trying a real job with new paper.

If you do not fully understand the instructions do not run the machine but call in a qualified technical service person to give you full training

Note that due to our policy of continuous product improvement the information in this manual is subject to change without prior notice.

## SAFETY PRECAUTIONS

- The machine requires a ground line, make sure it is connected, the power inlet is protected by a fuse above the socket.
- The machine uses several cutting blades, these are all covered by guards with interlocks, do not disable the interlocks.
- The machine uses a low speed suction infeed belt, do not let loose clothing or hair get near the belt.
- The machine uses several outfeed cutting tools on a rotating shaft, these are guarded, do not disable the guard.
- The electrical cabinet of the machine is covered, do not uncover the cabinet.
- Do not use the machine in direct sunlight as this may affect the sensors.
- Do not use the machine in a very hot / humid environment as the paper will become distorted and not run well, best operation temp 25 deg c @ 60 % rh.

## WHAT THE MACHINE IS DESIGNED TO DO

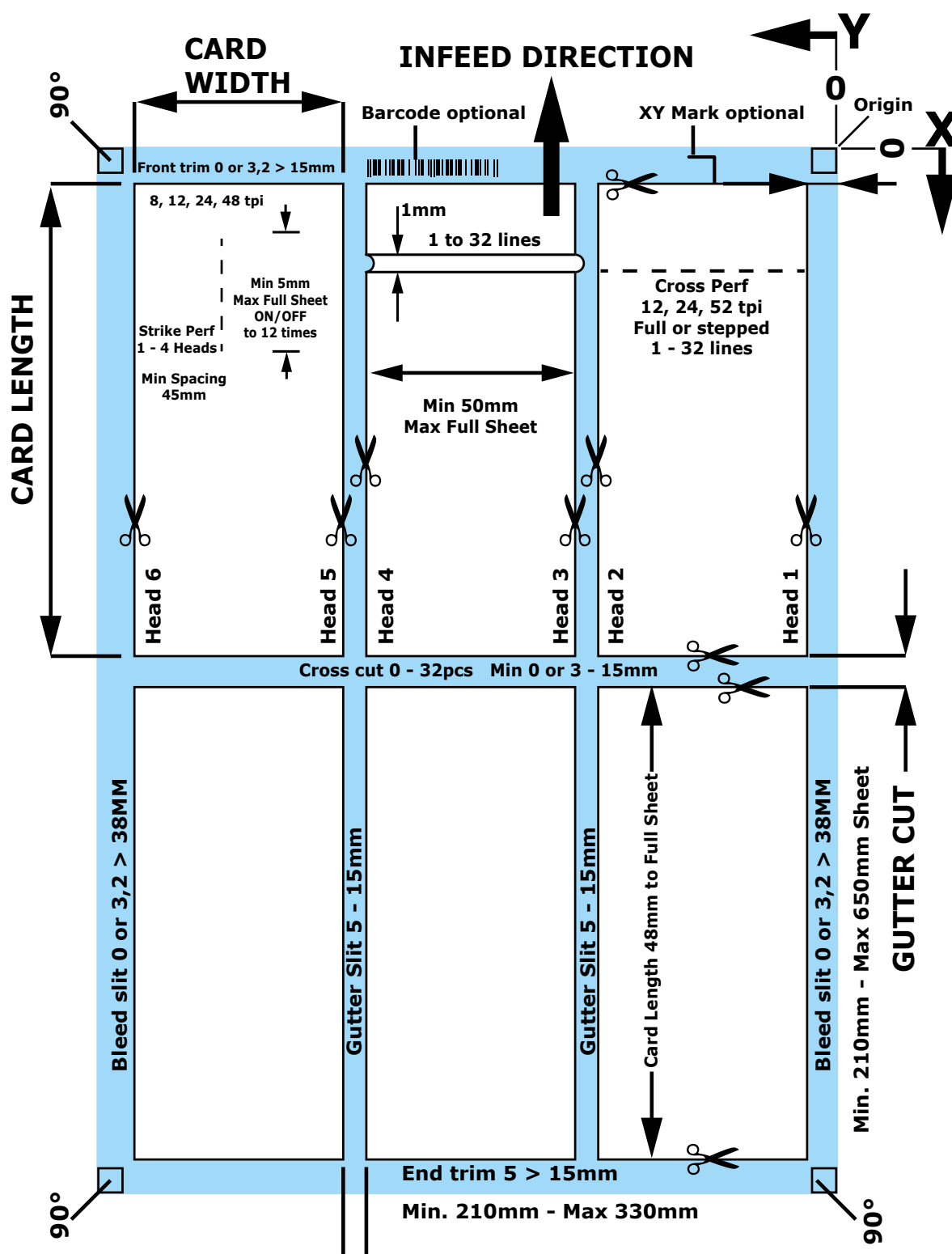
Basically its a device to produce many smaller sheets or cards from one large sheet of paper card.

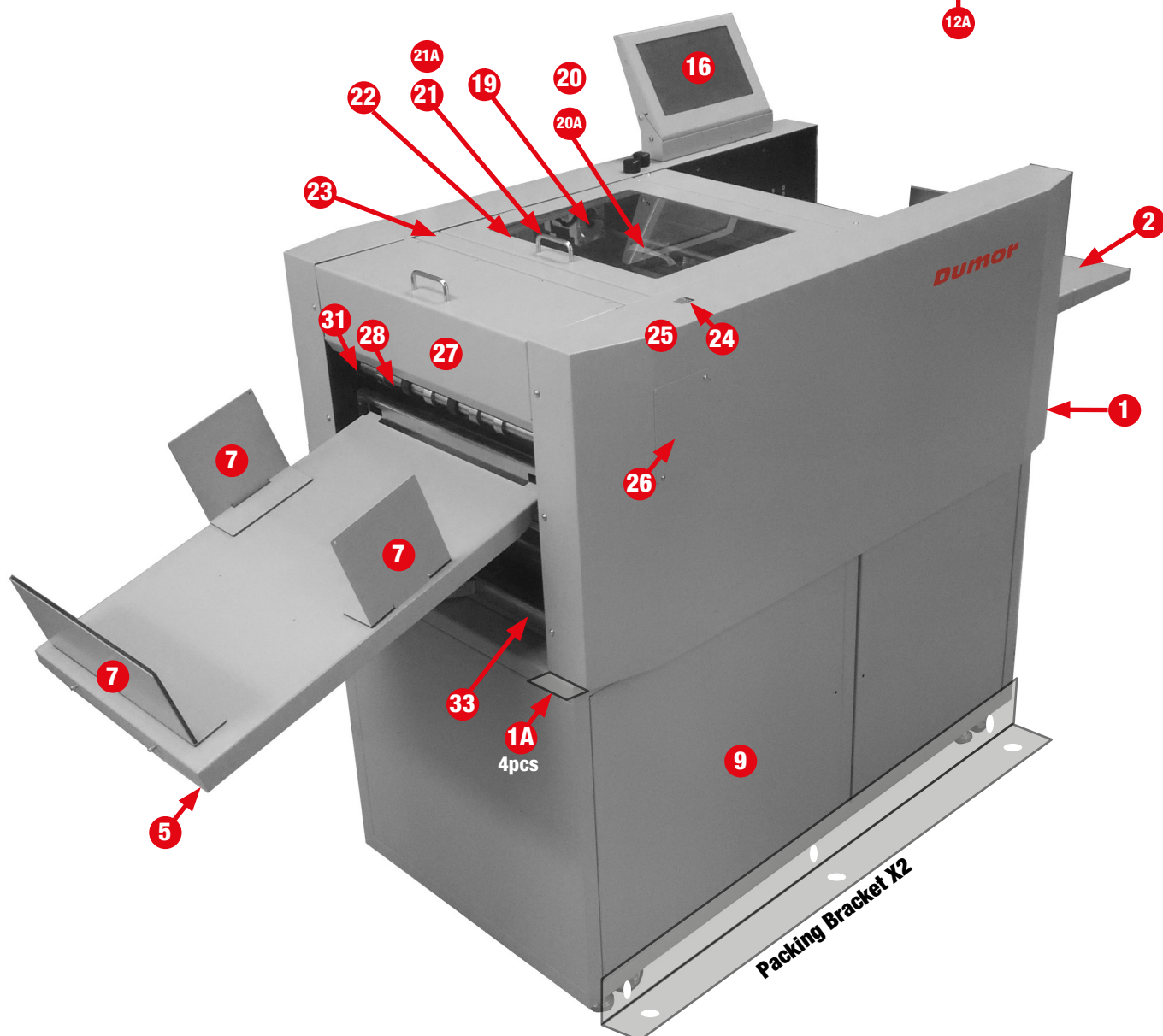
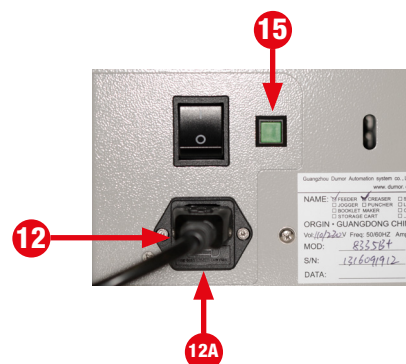
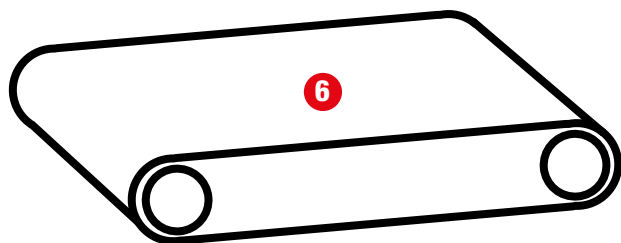
The smaller sheets can then be further finished in line in the same pass by certain optional tools within certain limitations as noted on the **TEMPLATE A**

## OPTIONS

- Cross ways programmable creasing
- Cross ways programmable perfing either continuous or stepped
- Lengthways scoring
- Lengthways perfing
- Lengthways kiss cutting
- Lengthways slitting
- Lengthways programmable strike perfing
- Business card stacking tray set option
- Card separator plates to separate small cards
- Stepping conveyor option
- For the specification of the use of the tools and options ; see the template below

## TEMPLATE A







## WHAT'S IN THE CRATE:

- 1 Main unit attached to the skid by bolts and with 4 lifting handles
- 2 Infeed tray extension => fits to the 3 screws on the lifting tray
- 3 Infeed tray magnetic posts x3 pcs => they are positioned on the sides and the end of the paper pile to guide the paper in during feeding.
- 4 Infeed tray "hook on" and magnetic deflectors x 4 pcs => are positioned on the suction box and in the slot of the cross bar see the picture for reference.
- 5 Outfeed tray => hooks onto the outfeed end panel and support arm into the slots below
- 6 Optional outfeed stepping conveyor, plugs into the socket at the end of the machine
- 7 Outfeed tray magnetic side and end guides set=> are positioned to receive the out-fed sheets according to size.
- 8 Creasing bar @1 mm pre-fitted into the slot
- 9 Waste bin pre-fitted under the waste chute
- 11 Colour touch screen display ( requires fitment by technical service) do not damage it on installation..
- 12 Power cord with earth line.  
Small tool kit

*Note that the machine is heavy and 4 strong persons will be needed to unload it from the skid*

The unit is on casters with levelling feet.

## Preparation of the machine before use

1. Check the voltage and frequency matches your power source before plugging in  
The power source needs to be 10 amp and with a ground line.
2. Unbolt the lifting tray support plate ; failure to do so will break the lift motor and invalidate the warranty!
3. Have a technician to fit the display ( see instructions for this later in the manual ) you may need to calibrate the pixels in the screen (see later )
4. Fit the standard accessories as described above.

## Functional parts of the machine from right to left (see pictures end of the manual)

- 2 Infeed tray for about 20 cm pf paper
- 11 Touch screen
- 3 Magnetic guides
- 4 Paper deflectors
- 13 Paper feed height adjustment sensor knob
- 14 Paper skew adjustment knob
- 15 Tray descent button (green)
- 12A Fuse in power socket
- 16 Air blast vents with vernier sequential opening
- 17 Air blast adjustment knob with scale



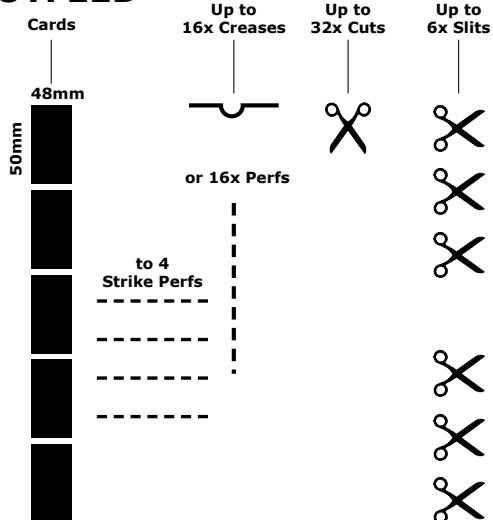
- 18** Separator fingers , adjustable up and down to let in only 1 sheet
- 18A** Separator finger height adjustment knob with scale
- 19** Lifting plexi cover with interlock switch
- 20** x/y mark reader
- 20A** Bar code reader option
- 21** Slitting heads 1 2 3
- 21A** Slitting heads 4 5 6
- 12** Gutter bleed slit deflector ON/OFF knob on heads 3 and 4
- 23** Cross cutting blade set
- 24** Pressure adjustment knob on front cover with 5 steps
- 25** Pressure adjustment compensation knob on the paper rollers 2 pcs
- 26** Slide in tool access hatch with interlock switch
- 27** End cover with interlock switch
- 28** Outfeed rubber traction rollers and or linear tools
- 29** Socket for strike perf tool option x 4
- 30** Mounting bar for linear tools with mm scale
- 31** Bayonet fitting lower shaft with small locking clips and sliding bearing
- 5** Outfeed tray; and/or optional stepping conveyor
- 7** Outfeed tray magnetic guides
- 32** Card reception tray option with deflectors option
- 33** Socket for stepping conveyor option
- 10** Waste tray under the slitters behind access door with interlock switch



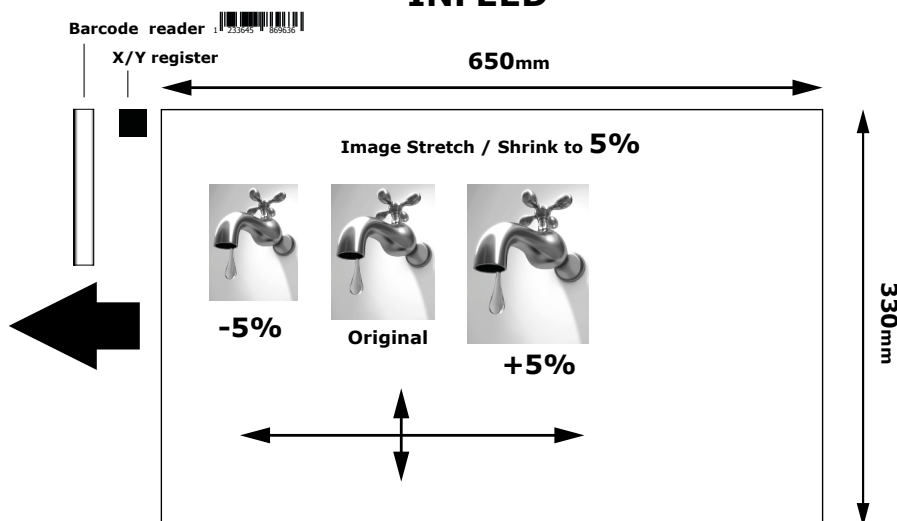
## HOW THE MACHINE OPERATES

### TEMPLATE B

#### OUTFEED



#### INFEED



## GENERAL PREPARATION OF THE JOB

### Steps

**0** you select a pre-programmed job from the list on the screen

OR :

**1** you program in the paper size and weight to be in-fed

**2** you program in the slits to be made within the template spec

**3** you program in the cross cuts to be made within the template spec

**4** you program in the cross creases to be made within the template spec

**5** you program in the strike perfs to be made within the template spec

THEN:

**6** As needed you position any further linear tools required on the outfeed tool carrier bar as per the template spec

**7** You set the air blast according to paper weight; light paper ,almost closed , heavier paper open up the vents gradually so the top sheet floats

**8** You set the separator fingers according to the paper thickness, thin paper almost closed , for thicker paper open up gradually so only the top sheet feeds

**9** You set the magnetic infeed posts to lightly touch the sides and back of the paper to let it run freely but still be guided closely, if they are too tight the paper will not feed. The posts are rolled into place to avoid scratching the table

**10** You set the outfeed tray guides to receive the paper without it getting caught by the side guides

*Once this is done the paper is ready to be run the first trial sheet*



When you start the machine the following will happen in sequence:

- The paper pile will lift to the level of the upper sensor finger which stops it moving further up  
As the pile is fed in and used up the tray will index upwards about each 15 fed sheets
- The air suction and blast will start up
- The feeding belt will index the top sheet forward about 6 cm
- The gripper rollers will grasp the sheet and move it to the mark reader and under the double sheet controller
- The double sheet controller will check that only 1 sheet is fed in , if not an error message will appear
- If the mark reader is on the slit heads will adjust to compensate for the mark drift
- The heads 1 to 6 will position according to the program requirement
- The machine will check if the gutter deflectors are correctly set for the job , if not it will issue a error message and they will need to be re-set
- The sheet will advance forwards into the slitters and be slit into several strips
- The strips will advance forwards into the cross cutter and be cut into several cards
- The cards will advance into the cross creasing or perfin tool and be creased or perfed accordingly
- The cards will advance into the strike perf heads and will be intermittently perfed accordingly
- If other linear tools are used they will also re- work the cards
- The cards will be expelled into the outfeed tray or conveyor

### **ACCURACY OF THE MACHINE**

The design accuracy of the machine is +- 0.2 mm cumulative

The machine is only as accurate as the paper that is put in the tray, it will not recuperate for correct poorly cut paper.

### **VERY IMPORTANT**

The paper has to be :

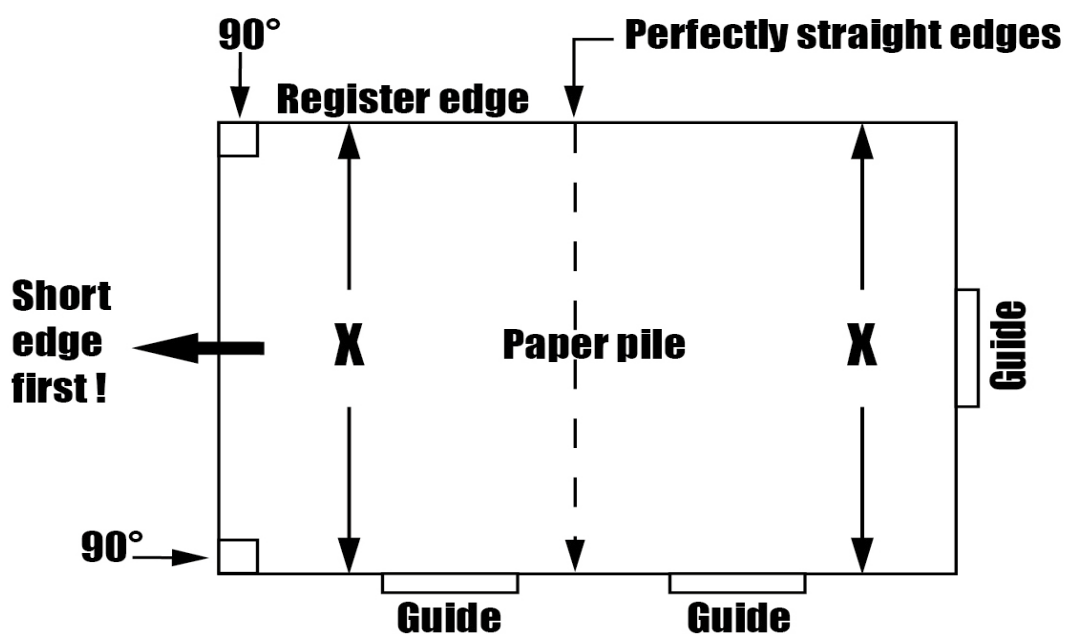
- Cut straight, or it will skew
- Cut parallel, or it may not feed and will wobble on infeed
- Cut square at least on the front edge, or the first cut will be erratic
- Cut cleanly eg not hooked or rough edges, or the paper may not feed or pull in double sheets
- The paper is not wavy or distorted, or it will feed poorly
- The paper is not curled, or it will not feed correctly

**See template C next page**



## TEMPLATE C

### TOP VIEW OF PAPER PILE



### SIDE VIEW OF PAPER PILE



### FRONT VIEW OF PAPER PILE





**Once all is double checked the machine can be turned ON**

**Understanding how the machine cuts to get a good result**

To get the machine to work correctly you first need to understand the cutting operation / measurements and settings.

### **Definition of the cutting process**

#### **- The uncut sheet**

The machine calculates and works from a **unique reference point** which is the back edge left side corner of the paper

Known as the **origin 0/0**, all other things are referenced to this point.

#### **- There are 2 cut axis**

**X direction** means length-ways positioned cross cuts or cross creases or strike perms

**Y direction** means cross positioned slits

#### **- Mark reader**

There is a mark reader that will re calculate the cut positions according to the movement or drift of the printed mark as compared to the origin point in both axis.

*If the mark is not positioned and printed correctly the cut positions will be incorrect.*

#### **- Laying out the cuts**

If you want to layout a sheet and then cut it accurately you need to know certain reference points as compared to the origin see the template.

In the **X direction** from left to right in order

- The total sheet length
- The lead edge first cut
- The card length
- The gutter cut length between cards , if required
- The nr of repeat card cuts that need to be made
- The remaining trailing edge trim cut

**All the amounts have to be within the template spec and add up exactly to the full length of the sheet**

The length of the sheet = lead trim + (card length x n) + (gutter cuts x n) + tail edge trim.

In the **Y direction** from back to front in order

- The total sheet width
- The rear bleed trim
- The card width
- The gutter width
- The total nr of cards and gutters required (*usually max 3 rows but can be up to 4 rows if no gutter slits required*)
- The side trim bleed width

*Note side trims are always deflected to the waste bin unless the heads are set at home position*

*Sheet width = front and back side trims + (card width x n) + (gutter strips x n)*

### **Math**

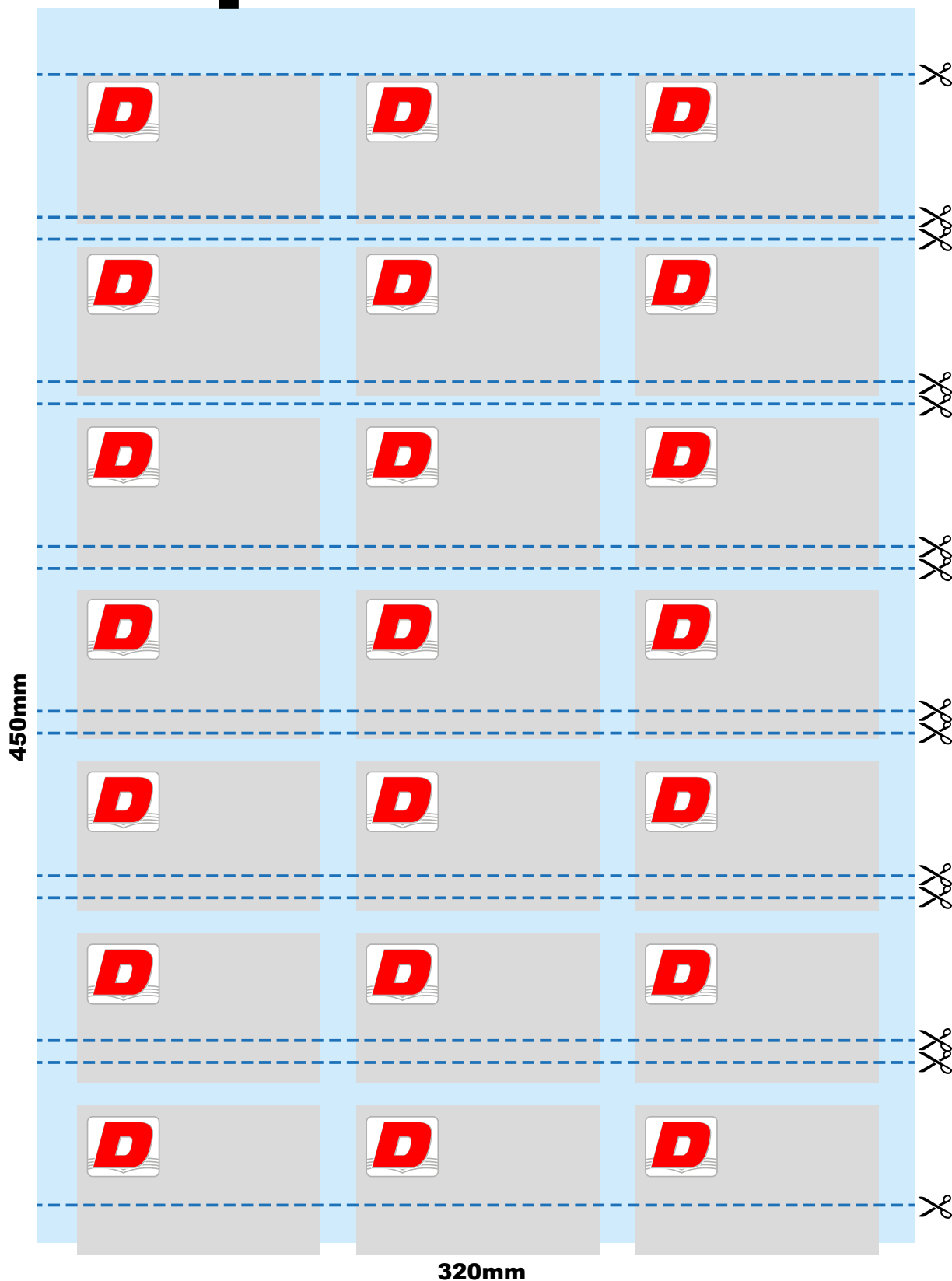
It sounds obvious but the numbers need to add up....

A precision **steel rule with 0.5 mm increments** is a must to set these jobs.

**What can go wrong: >>>>>>>**

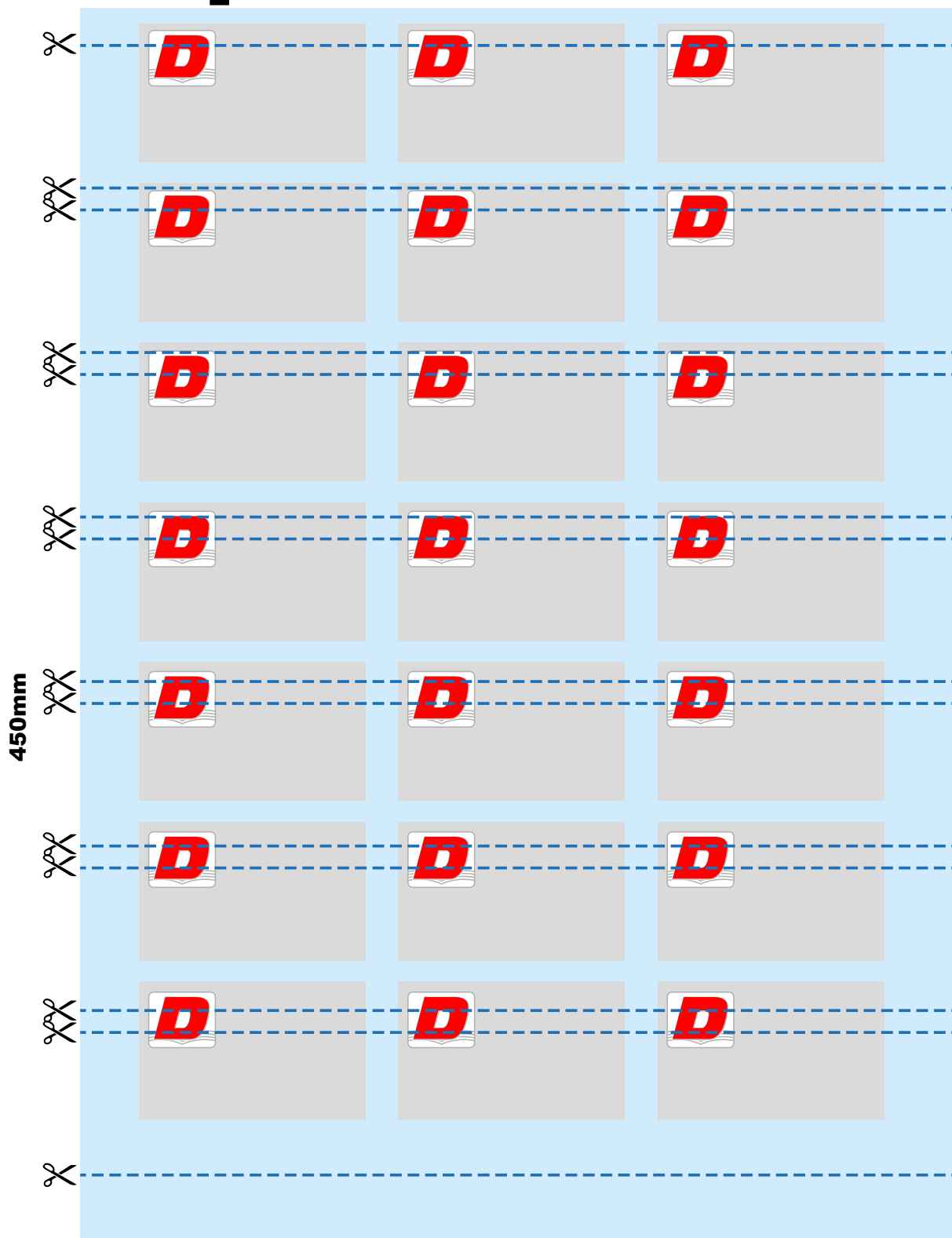


Error 1 CARD MOVING DOWN





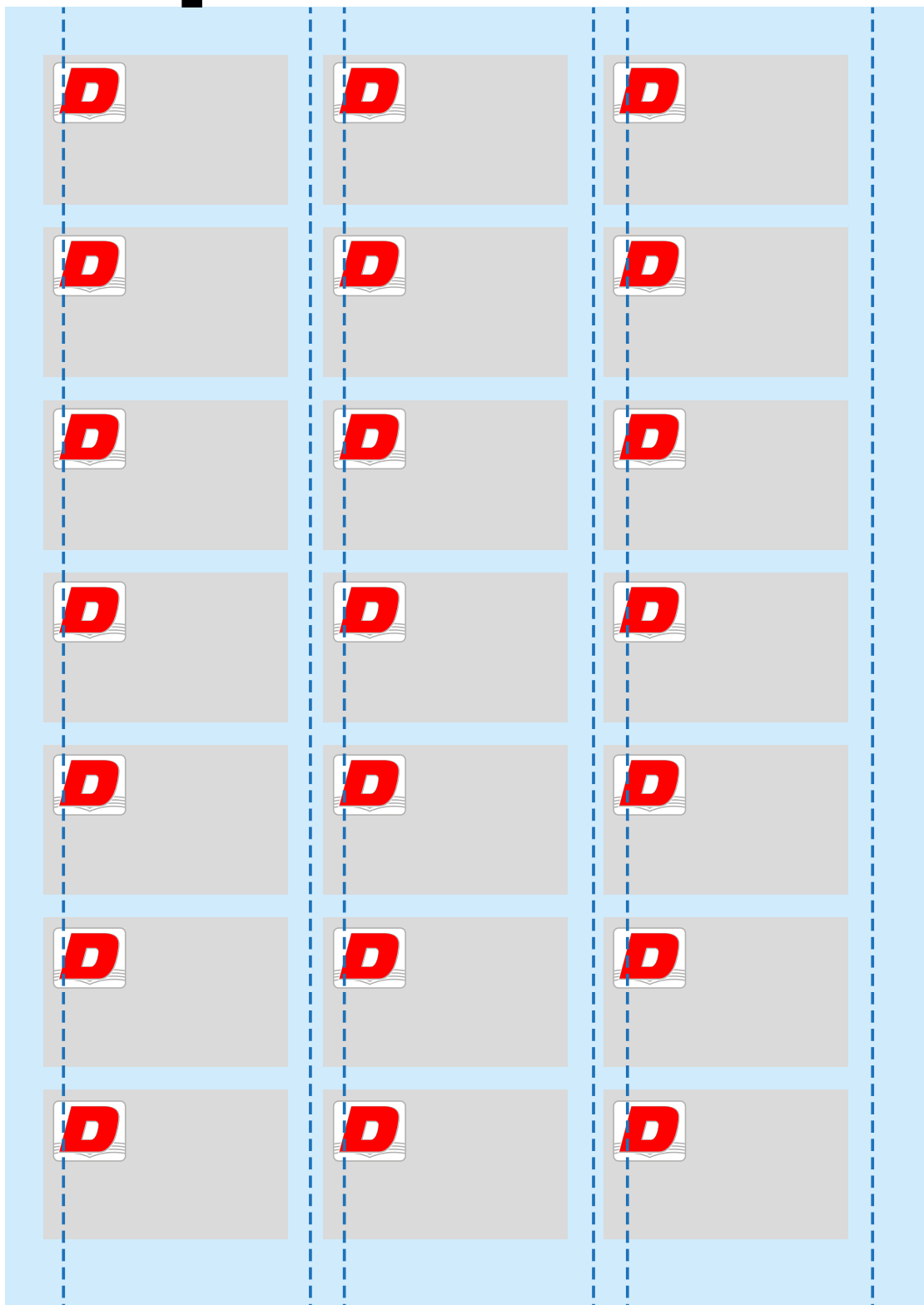
**Error 2 CARD MOVING UP**





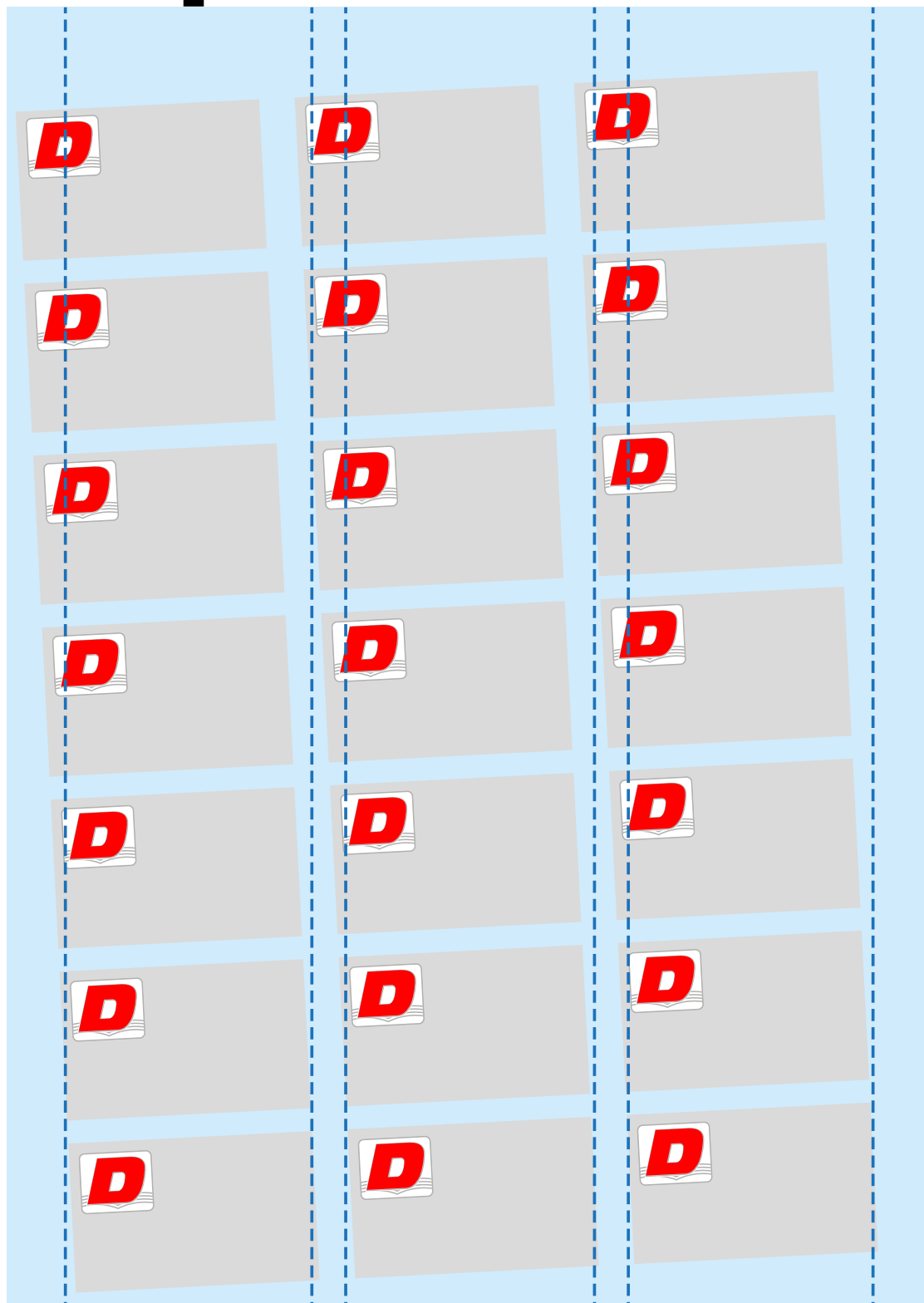
Error 3

CARD NOT CENTERED LEFT OR RIGHT





**Error 4 CARD SKEWED LEFT OR RIGHT**



## STATIC ERRORS X OR Y

- The numbers don't add up  
*The machine will reject the input amounts if out of spec and indicate an error*
- The print bleed end is too near the cut and any small difference will be noticeable  
*Make sure the bleed is at least 3 mm over the cut position to be sure....*

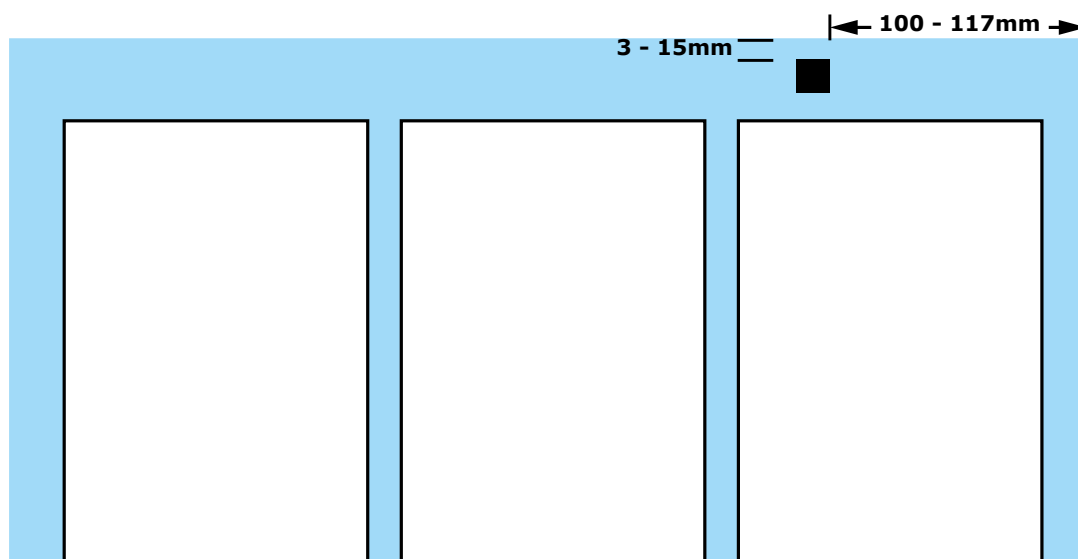
## Dynamic errors X or Y

- The image is too short in the x direction compared to the cut settings and the image “progressively climbs up” the cards in sequence of cut
- Same in the Y direction but the error is static  
*When you check remember the bottom card in the tray is the first one out....*


Or  
The image is too long or cross cut too short and the image “progressively climbs down” the card.  
*The sheet is skewed and the cards move to the left or right in sequence of cut*

These are layout and printer errors and not machine cutting errors  
*The problem needs to be addressed at source.... eg the layout and or the printer*

## XY MARK (optional)



## USE OF THE MARK

The position of the “” mark is indicated in the attached diagram  
*Note the mark has to be 100 % solid black or will not be read*

Positioned as per the template

The machine will read the mark and re-locate the heads according to the movement.

This can take a little more time and reduce the throughput speed

So if you want full production speed then turn the function OFF

**Note** that in the screen to set the mark position the +/- button has 2 settings

**Short press** = incremental increase / decrease

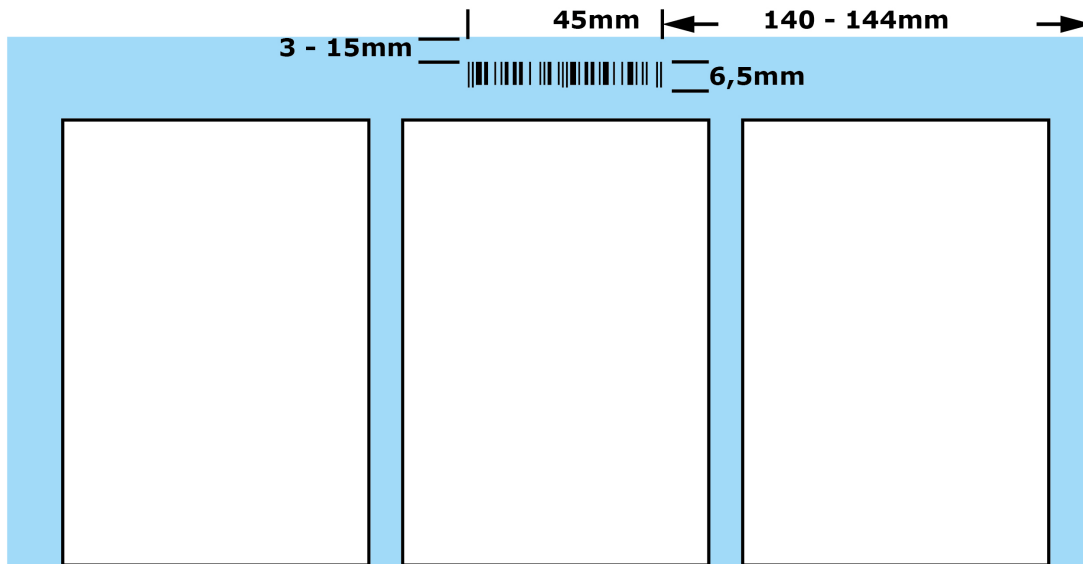
**Long press** = button becomes backlit and then the value can be entered by the adjoining keyboard then press ENTER



## USE OF THE BAR CODE

### BARCODE (optional)

*download and install the CODE 39.ttf font to create the barcode*



The bar code doesn't set up the job from scratch

The bar code will cause a memorized job number to be recalled and the nr of sheets to be fed will be input

The way to program a bar code is indicated in the attached diagram

You need to have the program in your printing software to be able to print the bar code from the raw data

#### Source:

If you don't already have a code 39 barcode generator in your pc here is a source:

a typical conversion program is on

[http://www.barcodetrader.com/bct\\_scan\\_barcode.asp](http://www.barcodetrader.com/bct_scan_barcode.asp)

Use the font called **code39.ttf** (there are many other codes but they are not supported )

You download the Font from the site and save it

#### Structure of the raw readable data

Star then 5 integers then star

eg: \*12345\*

The first 3 digits are the job nr as per the machines loaded memory

Jobs 1-64 are factory installed in the factory program file

Jobs 165 - 228 are user programmable and saved in the user program file

#### Size of the printed barcode (see above)

Wide bar 1 mm x 3 pcs

Narrow bar 0.5 mm x 6 pcs ( black and/ or white )

Height 6,5 mm approx

String width 45 mm

X from edge 3 - 15 mm

Y from edge 140- 144 mm as from the last bar





Each digit is represented by  
9 bars in total (5 black + 4 spacings)

#### **NOTE**

##### **Job nr**

Even if the job nr is **1** it has to have 3 digits eg **001**

##### **Quantity**

Same for the nr of sheets has to be 2 digits eg from **01** to **99**

#### **Processing speed**

The data is processed by reading the first sheet of the group which is fed in a little slower than usual  
The rest of the sheets are then counted but not read individually in order to speed up the sheet feeding to full speed  
Once the last sheet of the batch is done the next batch first sheet is read etc...

#### **Speed setting button**

There are 4 feed speed settings on the screen

Scroll to select

*For the most accurate cutting use the lowest speed setting*

**Using the touch screen** (*Do not press too hard on the screen or you will kill the pixels, Warranty invalidated*)

**Calibration of the screen** (*Only to be used if the buttons on the screen are out of position*)

To open the function

Press the OK button 5x repeatedly

The calibration screen will open

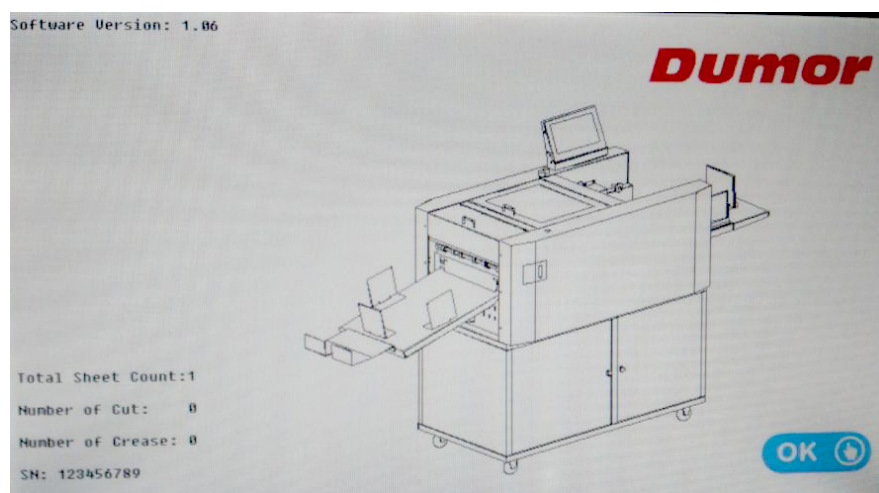
Use a blunt stylus to follow the pixel image

Once complete the screen will revert to the normal display

Turn **ON**

Welcome message appears

## **SCREEN 1**



You will see the machine drawing on the screen

Note :this screen has all the data of the machine

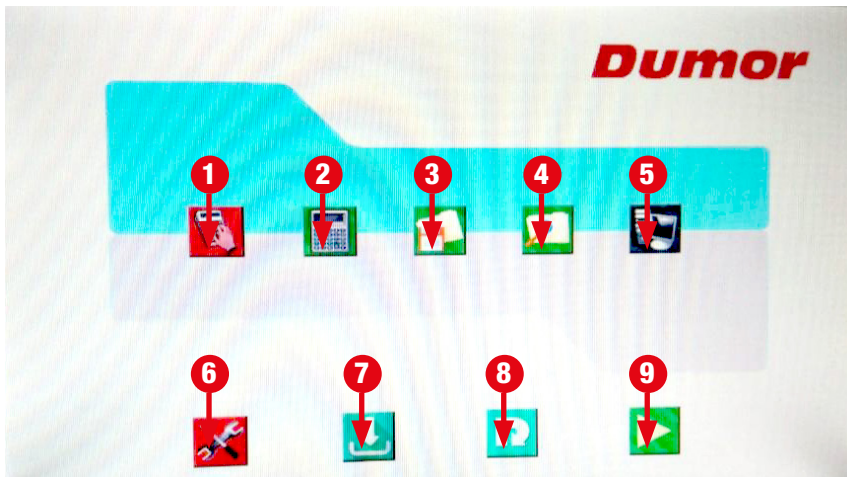
- Software nr
- Serial nr



- Accessories fitted
- nr of cuts ( for warranty )
- nr of sheets passed through

Press **OK** to go further into the main menu

## SCREEN 2



No	Description	Remark
1	Manual Programming	Input all the data one by one
2	Quick Programming	Create Template Automatically
3	User Template Storage	Recall the user template
4	Preset Template Storage	Recall the factory template
5	Communicating with PC	Reserved function
6	Settings	Enter into system settings of machine
7	Tray Down	Let loading tray down to home position
8	Back Home Position	Let all slitters back to home position
9	Start	Enter the run screen according the last available job data

### Top row icons, from left to right

Red calculator button = input data manually  
 Green calculator button = fit - to - page program fast entry  
 Green floppy disc button = recall user programs  
 Green magnifying glass button = recall factory programs ( 64 )  
 PC USB link = future PC USB link

### Lower Row

Red spanner/ wrench button = technical menu  
 Blue BIN button= tray down  
 Blue R button = send slit heads to home position  
 Green go button = run machine



- 1 Go home
- 2 Go back one step
- 3 Process speed selection
- 4 Sheet count preset
- 5 Batch count preset

In the middle pictorial view of the current job selected

Press icon to call up

- |    |  |
|----|--|
| 6  | Feed continuously                      |
| 7  | Test feed 1 sheet only                 |
| 8  | Reset Slitter Heads to travel position |
| 9  | Make the tray descend                  |
| 10 | Register make ON/OFF                   |
| 11 | Barcode reader ON/OFF                  |

## SCREEN 4



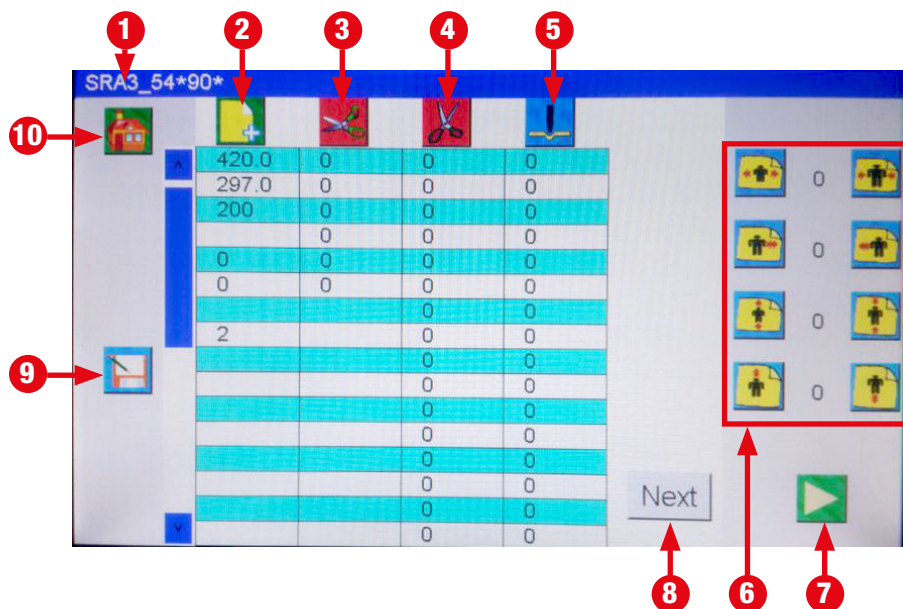
Grouped by function infeed size mentioned first, outfeed last



Press icon to call up

Note the factory programs can be called up, overwritten and memorized in the user memory

## SCREEN 5



No	Description	Remark
1	File Name	Template name
2	Paper Size	Set Paper spec., Crease depth, Black mark position
3	Slit Data	Set the data of the slitters
4	Cut Data	Set the data of Cross Cutter
5	Crease Data	Set the data of Creaser
6	Image Compensation	For dealing with the images shift or shrink/stretch caused by printing
7	Start	Enter running screen
8	Next Page	Go to the next page
9	Save as	Save the temper template with a new name
10	Home	Back to Main Screen

### Screen information

Custom manual program entry page 1

In the header the current job file name

### Icons across the Top

To home

Access table for infeed paper size input, crease depth, and mark position

Access table for slit settings

Access table for cross cut settings

Access table for crease line settings per card

### Icons on the Right

Image shift x/y increments of 1 %

Image shrink/stretch x/y increments of 1 %



### **Icon on the Left**

Save file

### **Icon on the bottom**

Next = Go to next input screen

### **Data entry style**

Enter the data in xxx.x mm format

Sheet length + ent

Sheet width + ent

Sheet thickness gsm + ent

Creasing force ( 1 to 5 ) + ent

Register mark compensation y direction+ ent

Register mark compensation x direction + ent

Screen for input of strike perf lines

Each head has a icon; nrs 1-4

Entry 1 is for the start of the line, entry 2 is for the end of the line and so on

The other icons are the same as the previous screen

### **Clearing old data**

Press the paper size icon

A pop up will appear asking: *Do you want to clear all values*

Select what you want to do

### **Screen for manual data entry**

First

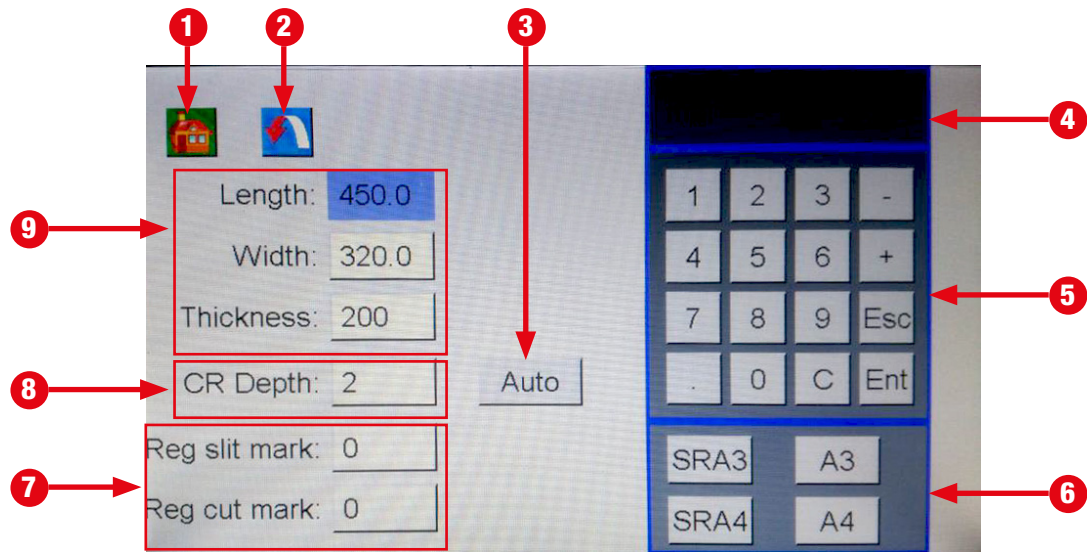
Use the long metal ruler to measure and write down each slit and cross cut from the reference edge.

Printing cut lines on the sheet will help with this

*Tip : Shut one eye to avoid parallax errors when reading the ruler*

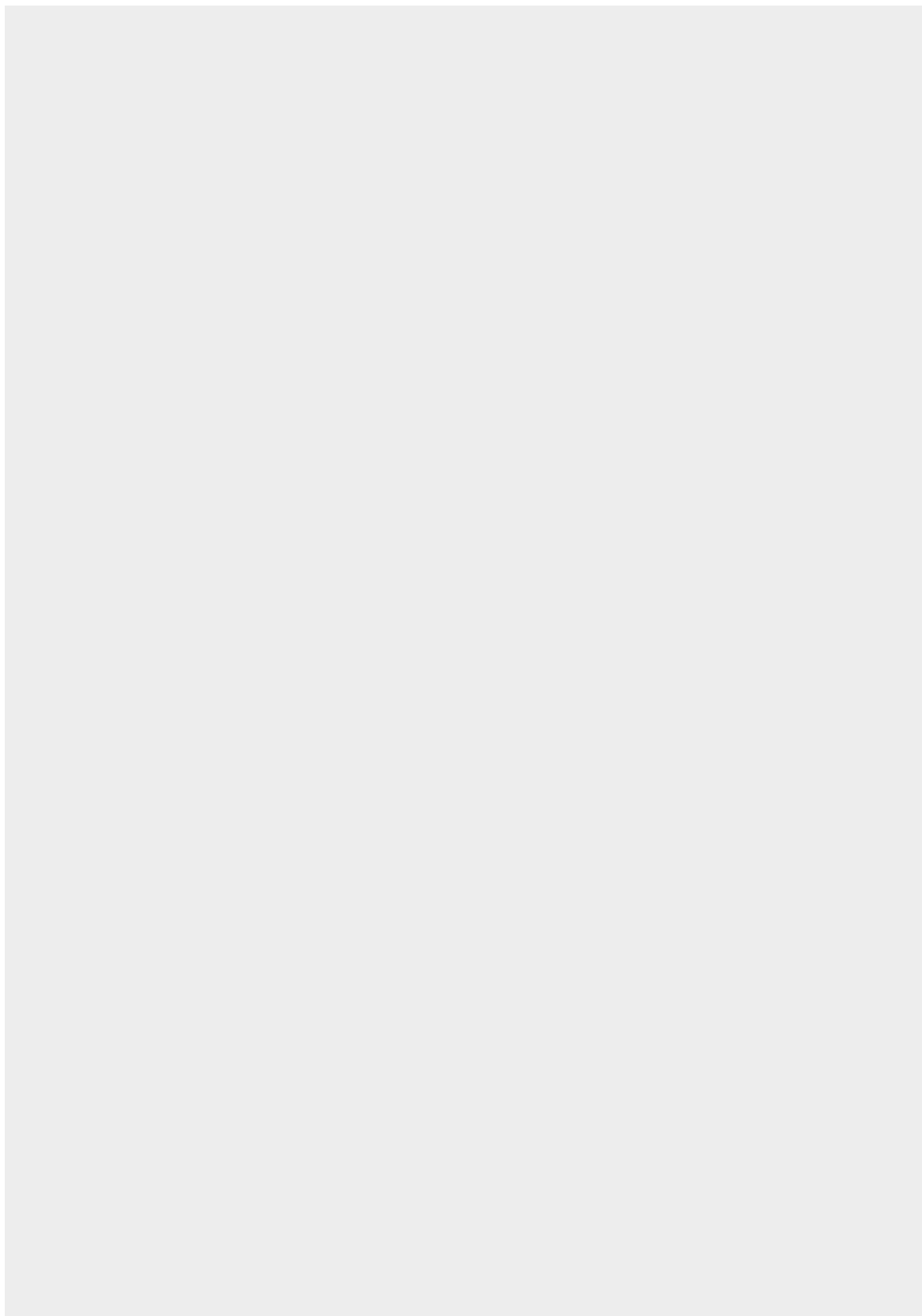


## SCREEN 6



No	Description	Remark
1	Home	Back to main screen
2	Return	Return to the last page
3	Auto	Auto setting crease depth according to paper thickness
4	Unit	Data unit mm or inch
5	Keyboard	Set all data according local request
6	Standard Paper Size	Set standard paper length and width
7	Register Mark Setting	Set position data register mark
8	Crease Depth Setting	Crease depth 8 levels to select
9	Paper Spec.	Set paper length, width and thickness

Enter the sheet size and card caliper in gsm using the keyboard or selecting a standard paper size as per the display  
 Enter the crease depth manually or automatically  
 Enter the register mark positions  
 Go to next screen

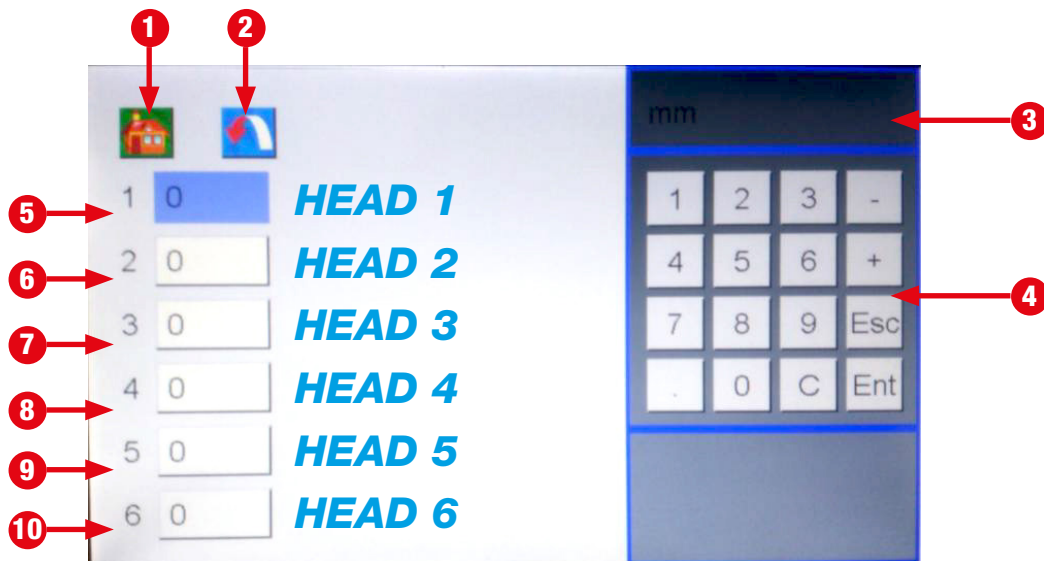






## SCREEN 7

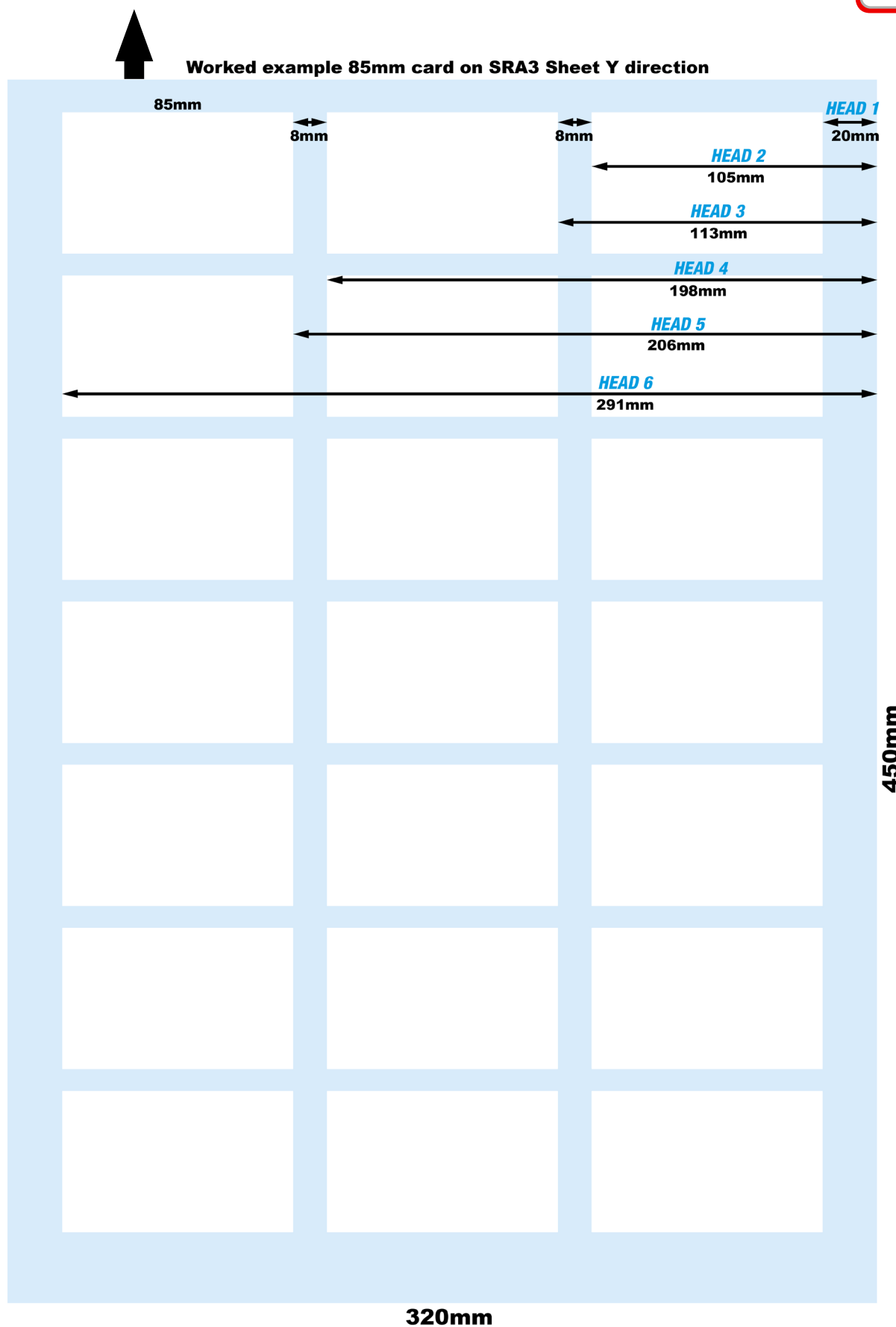
### Y DIRECTION



No	Description	Remark
1	Home	Back to main screen
2	Return	Return to the last page
3	Unit	Data unit mm or inch
4	Keyboard	Input all data according local request
5	Slitter #1 Data	Set slitter #1 data
6	Slitter #2 Data	Set slitter #2 data
7	Slitter #3 Data	Set slitter #3 data
8	Slitter #4 Data	Set slitter #4 data
9	Slitter #5 Data	Set slitter #5 data
10	Slitter #6 Data	Set slitter #6 data

Enter the slit positions keeping in mind the Max and Min permitted settings and that it all adds up  
Go to next screen





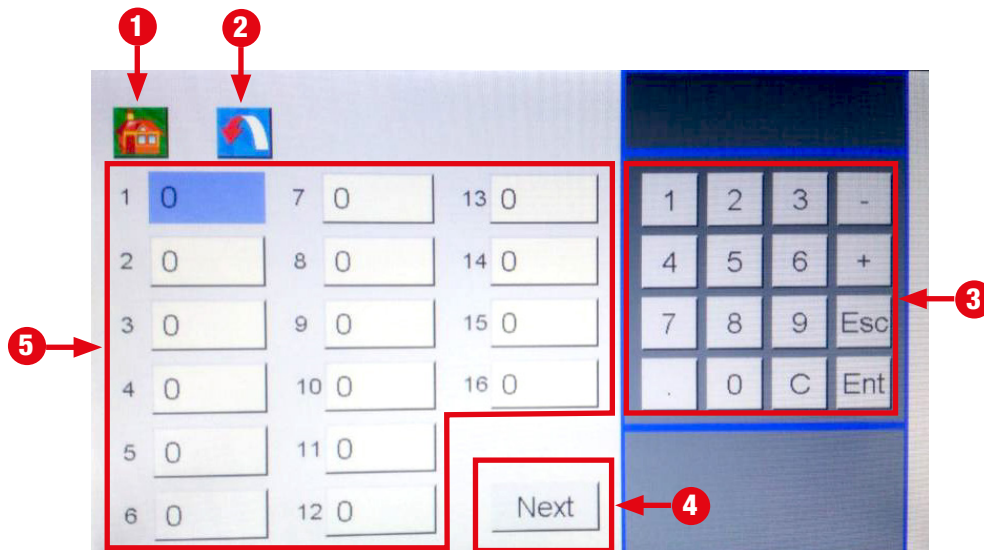


## SCREEN 8

### X DIRECTION CUT

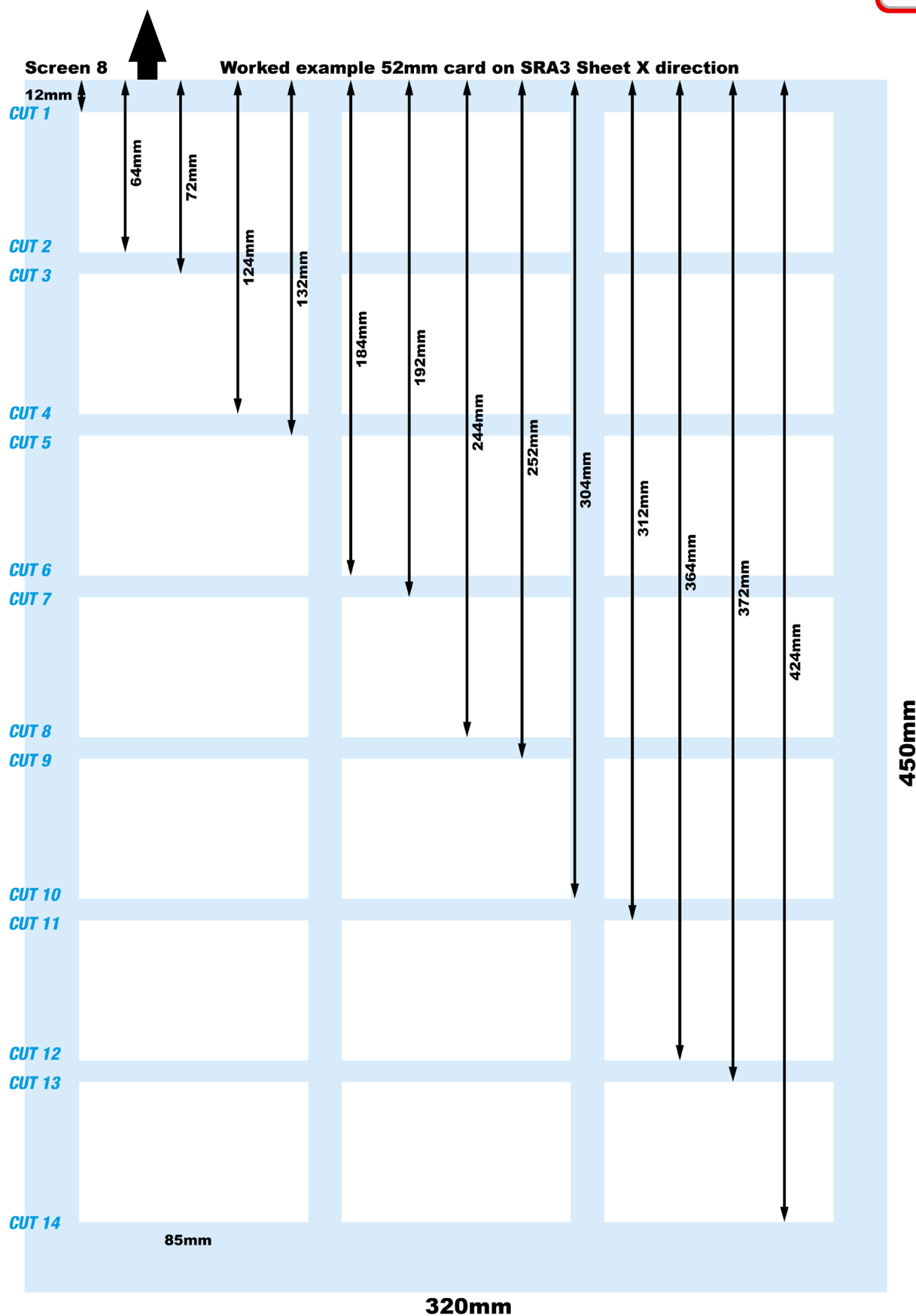


Press the icon entering cut data setting screen



No	Description	Remark
1	Home	Back to main screen
2	Return	Return to the last page
3	Keyboard	Input all data according local request
4	Next	Turn to Next Page (17~32 cut position data)
5	Cut Data	Set 1~16 cut position data according local request

Enter the cross cut positions keeping in mind the Max and Min permitted settings and that is all adds up  
Go to the next screen

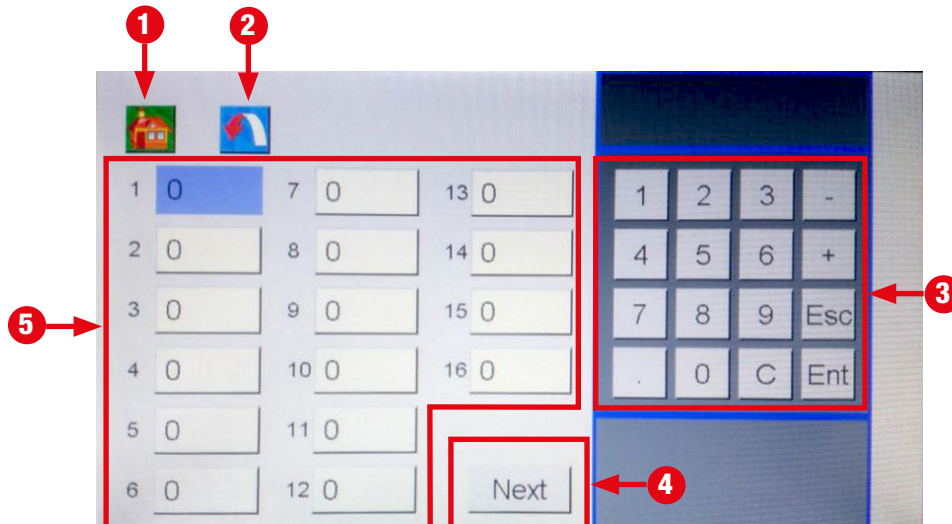




## SCREEN 9



Press the icon entering crease data setting screen

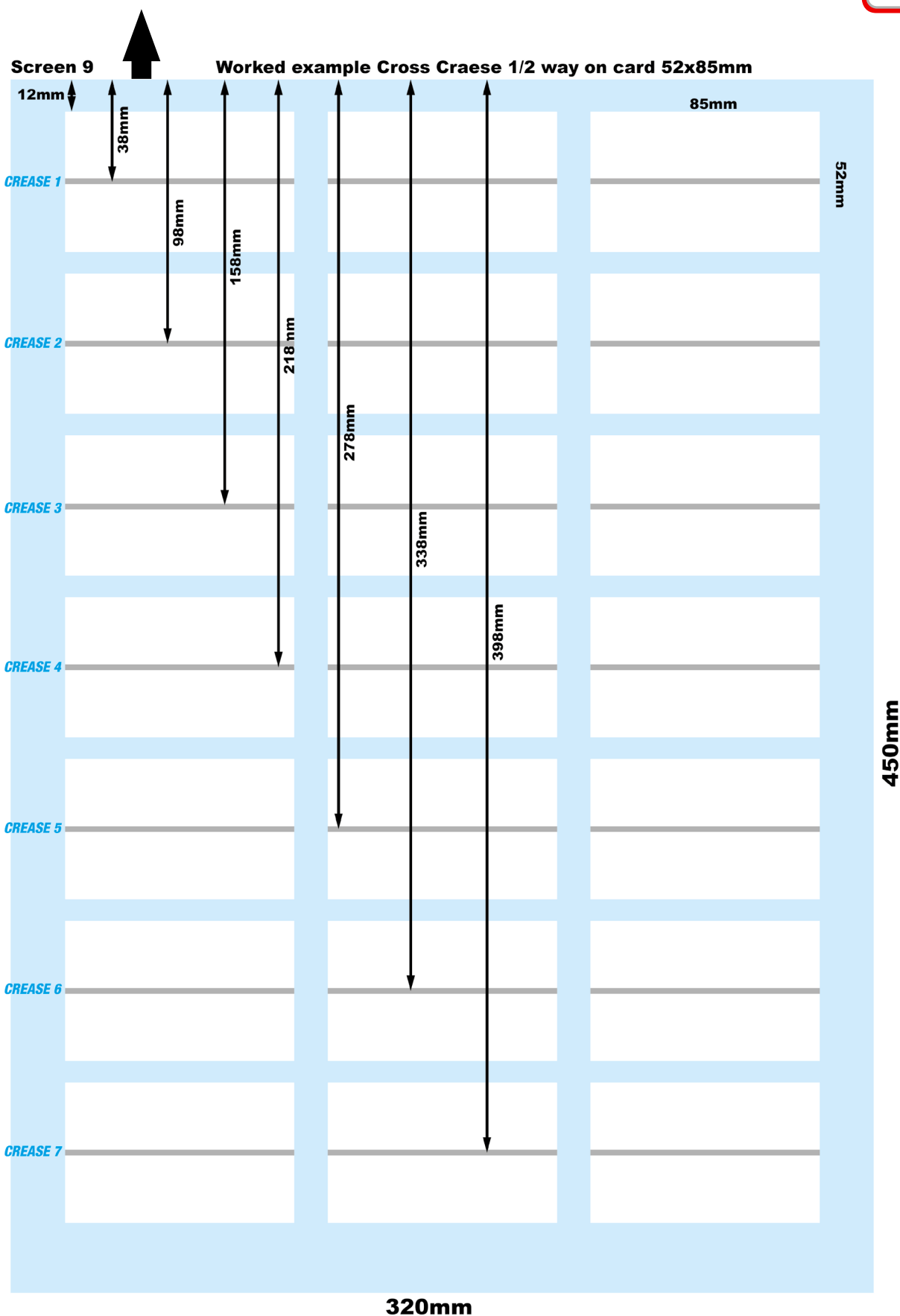


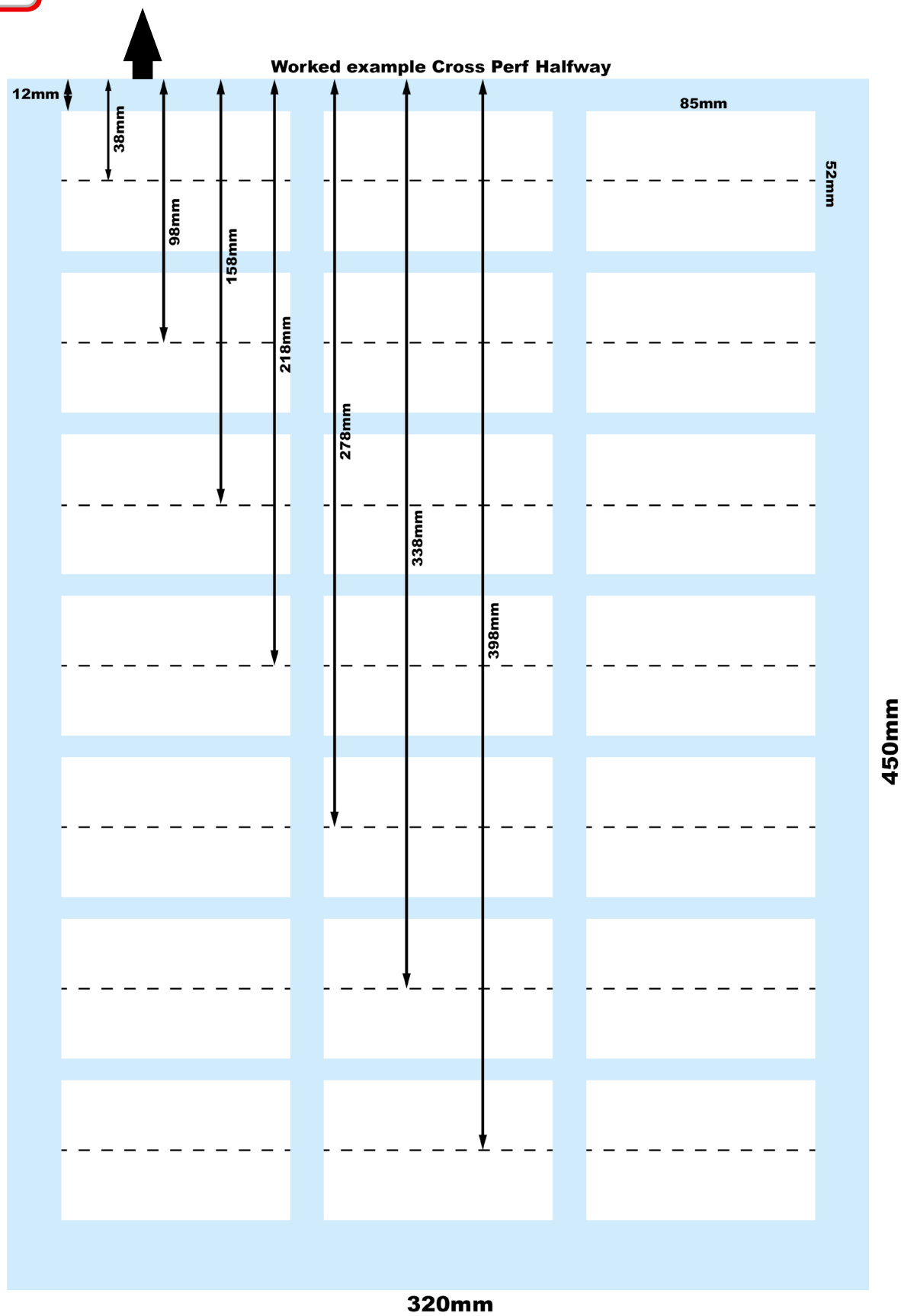
No	Description	Remark
1	Home	Back to main screen
2	Return	Return to the last page
3	Keyboard	Input all data according local request
4	Next	Turn to Next Page (17~32 crease position data)
5	Crease Data	Set 1~16 cut position data according local request

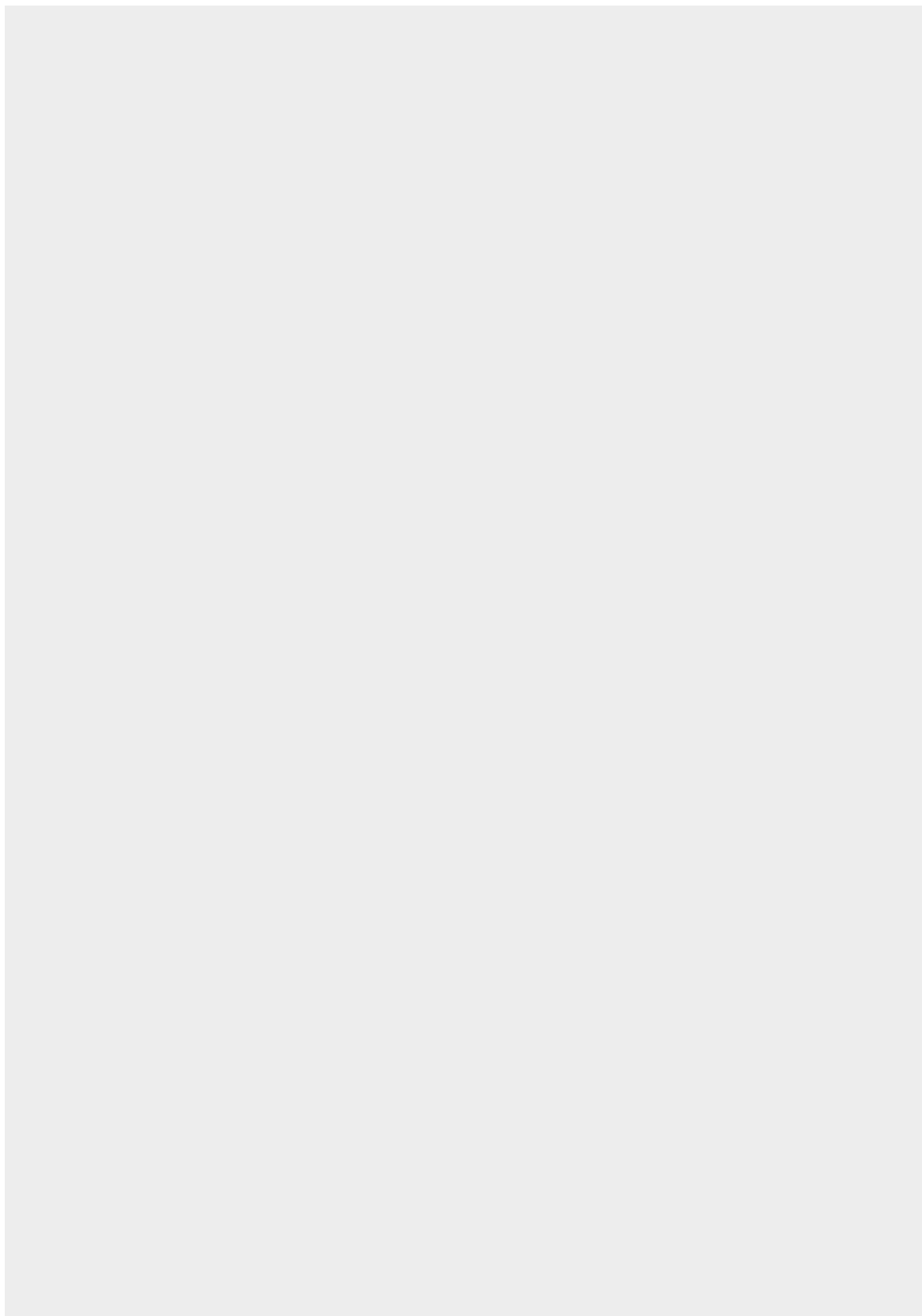
Enter the crease line settings **from the front edge of the sheet**

Keeping in mind the Max and Min permitted settings

Go to the next screen



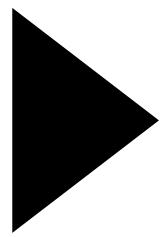
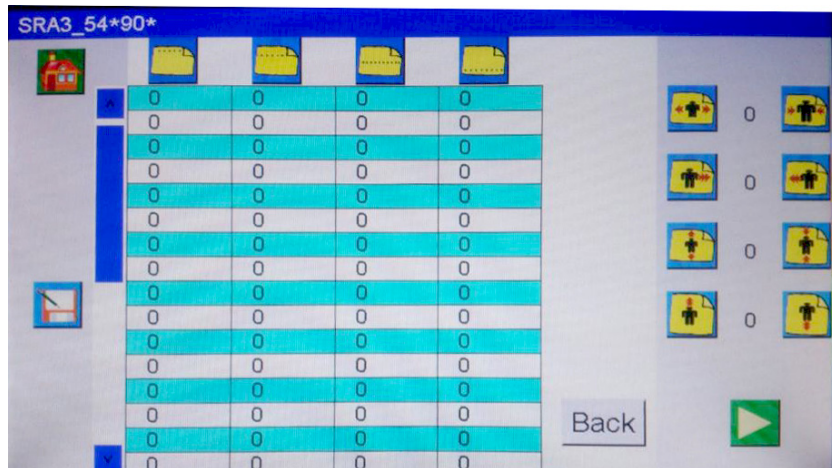






## SCREEN 10

Press the NEXT icon of manual programming screen, entering Partial perforating setting screen.



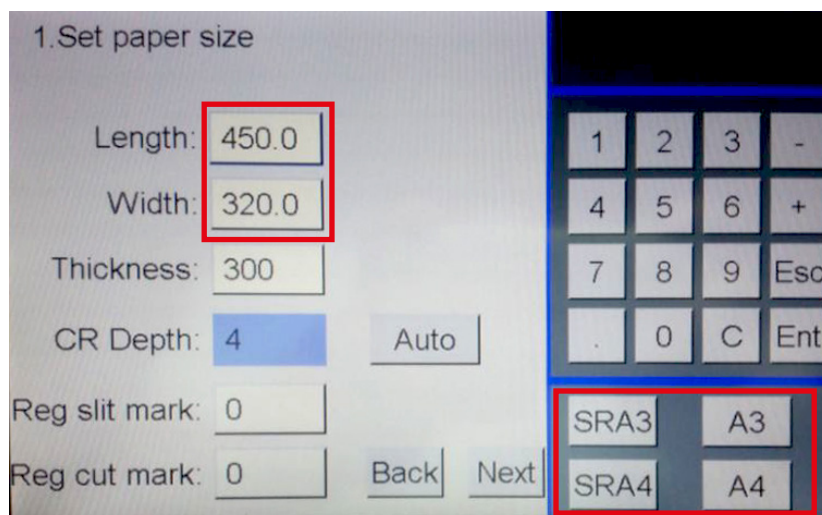
Enter the strike perfering positions on heads 1-4  
Keeping in mind the max and min permitted settings

Press the diskette icon to save the job in the user memory by entering a heading using the keyboard and then confirming

### Fit to page programming

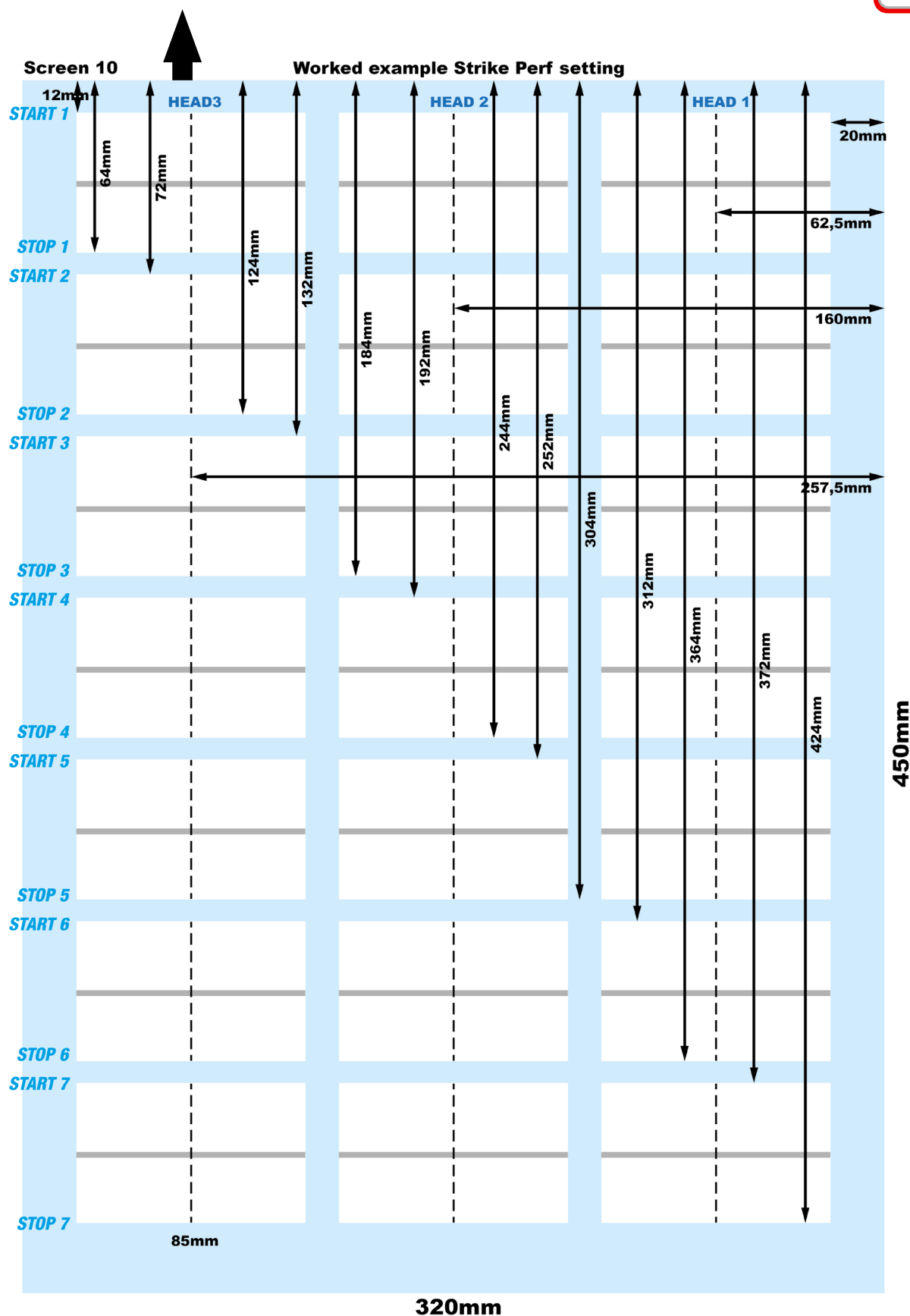
Remember all the values have to add up...the cut and slits have to be within the allowed values or the entry will be rejected.

## SCREEN 11



As above set the page size or use a preset size from the table  
-> Go to next screen





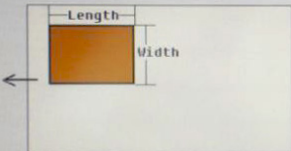


## SCREEN 12

2. Set card size

Card Length: 200.0

Card Width: 90.0



Back Next

1	2	3	-
4	5	6	+
7	8	9	Esc
.	0	C	Ent

Set the card size as per the diagram  
-> Go to the next screen

## SCREEN 13

3. Set Trim and Gutter

Lead Trim: 10.0

Side Trim: 15.0

Gutter Cut: 30.0

Gutter Slit: 10

Back Next

1	2	3	-
4	5	6	+
7	8	9	Esc
.	0	C	Ent

Set the cross cuts and slits  
-> Go to next screen

## SCREEN 14

4. Set Creases for each finished piece

1	100.0	7	0	13	0
2	0	8	0	14	0
3	0	9	0	15	0
4	0	10	0	16	0
5	0	11	0		
6	0	12	0		

Back Next

Set the crease position **from the front edge**

You can also use the standard fold templates to make it quicker to load

-> Go to next screen

## SCREEN 15

5. Set Perforate for each finished piece

1	100.0	4	0	7	0
	200.0		0		0
2	0	5	0	8	0
	0		0		0
3	0	6	0		
	0		0		

Back Next

Check that the diagram suits your wishes

If so run a test sheet

Then save the program as needed by pressing the diskette icon and saving under a name

### Recalling a program



There are 2 files

User file

The programs are stored alpha numerically

Press to recall



### Factory program file



In the factory file the jobs are classified by infeed size and then outfeed card size  
Press to recall

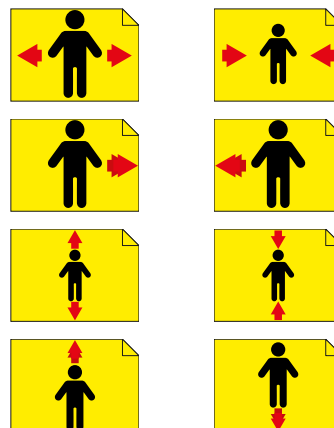
### Use of the shrink / stretch correction **Template C**

#### Left column

X direction print expansion compensation by %  
X direction right print shift compensation by %  
Y direction print expansion compensation by %  
Y direction print shift backwards by %

#### Right column

X direction print shrinkage compensation by %  
X direction left print shift compensation by %  
Y direction print shrinkage compensation by %  
Y direction print shift forwards by %

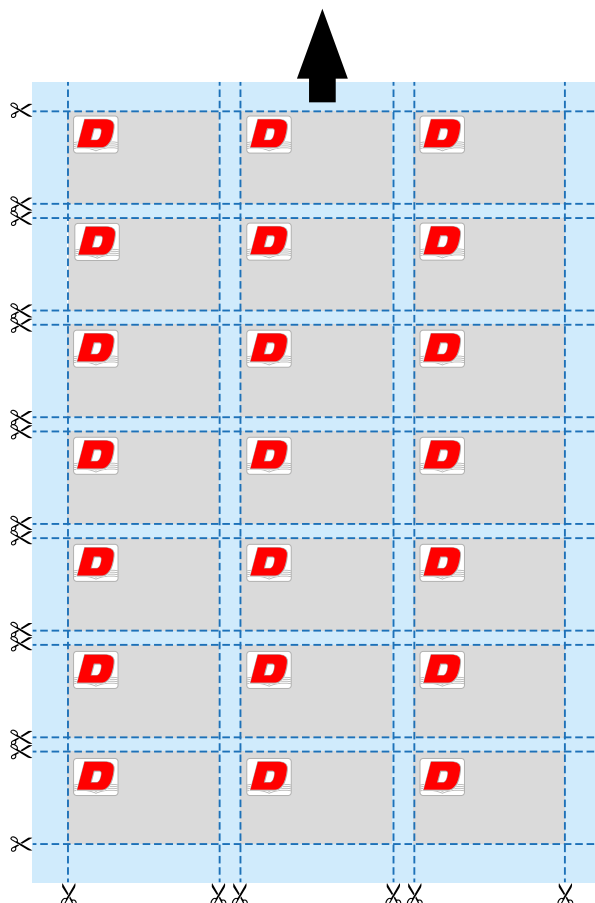


Press button sequentially to increase / decrease the correction value or continuously to access the keyboard.

*You need to measure the discrepancy and then divide it by the length to calculate the percentage to correct by eg a stretch of 1 mm over 100 mm is a -1 % correction.*

The machine will re calculate and save each cut and slit according to the correction percentage input.

**OK**

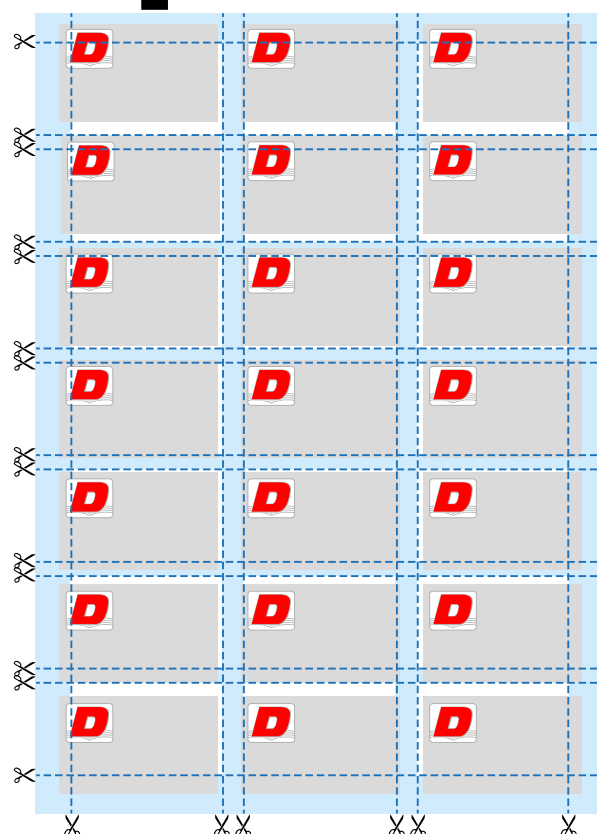




**Y EXPAND**



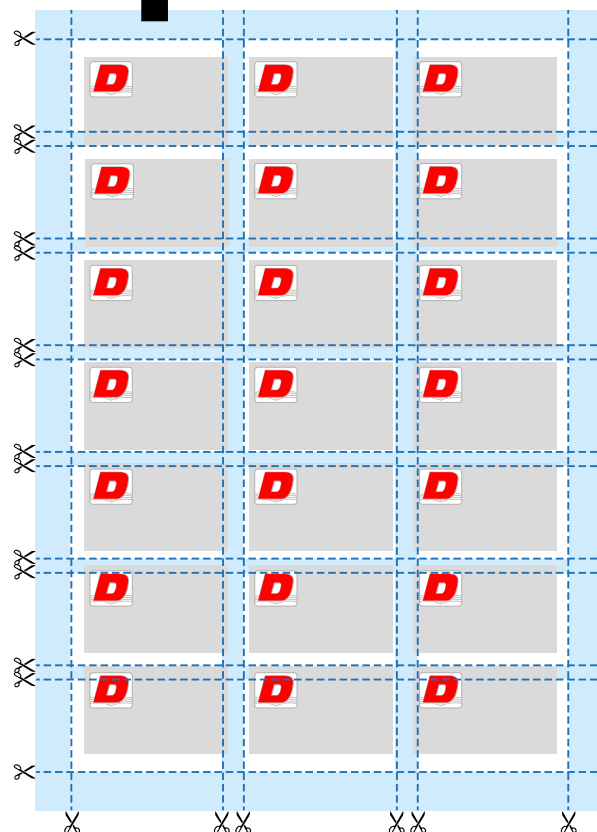
**CARD TOO WIDE**



**Y SHRINK**



**CARD TOO NARROW**

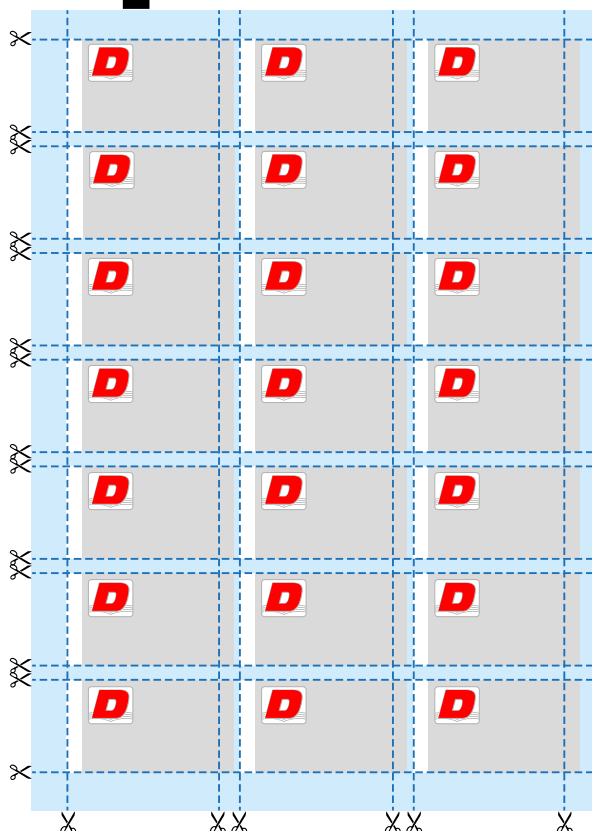




**Y SHIFT RIGHT**



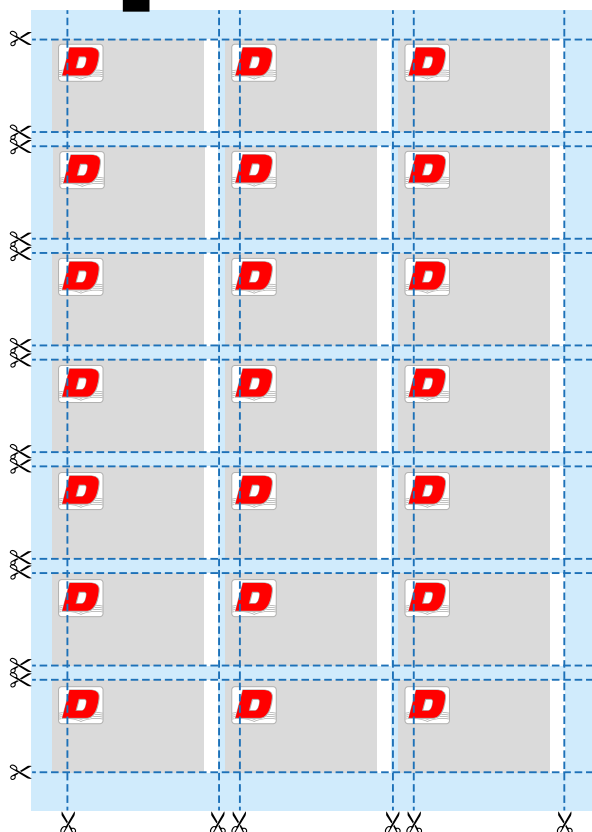
**CARD TOO FAR ON RIGHT**



**Y SHIFT LEFT**



**CARD TOO FAR ON LEFT**

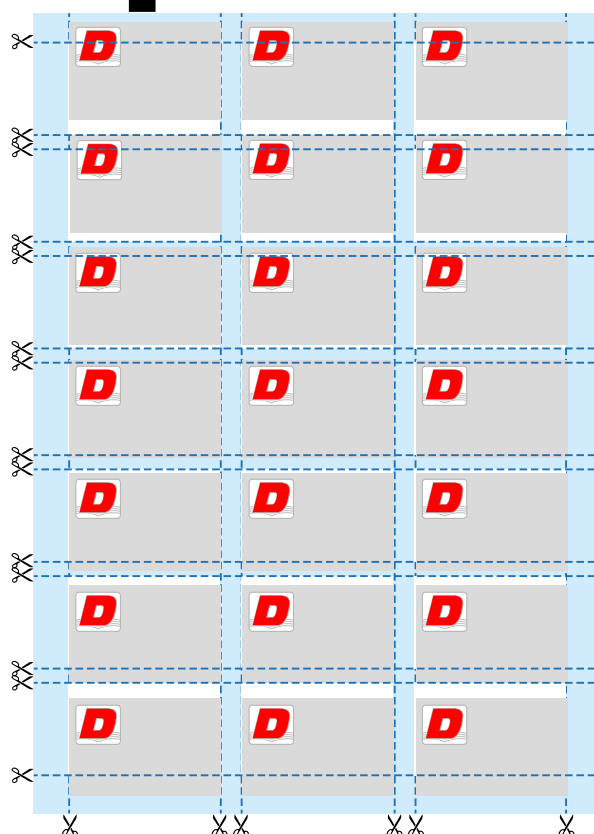




**CUT EXPAND X**



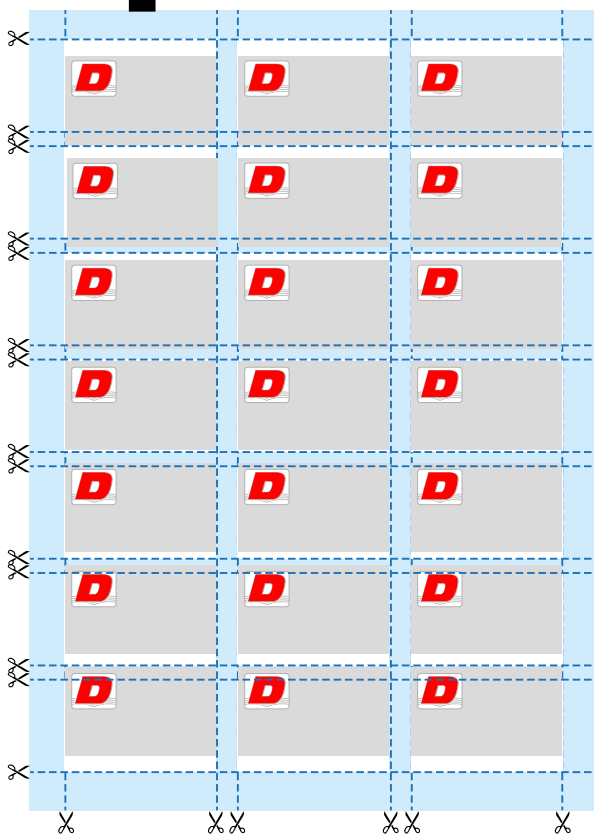
**CARD TOO LONG**



**CUT SHRINK X**

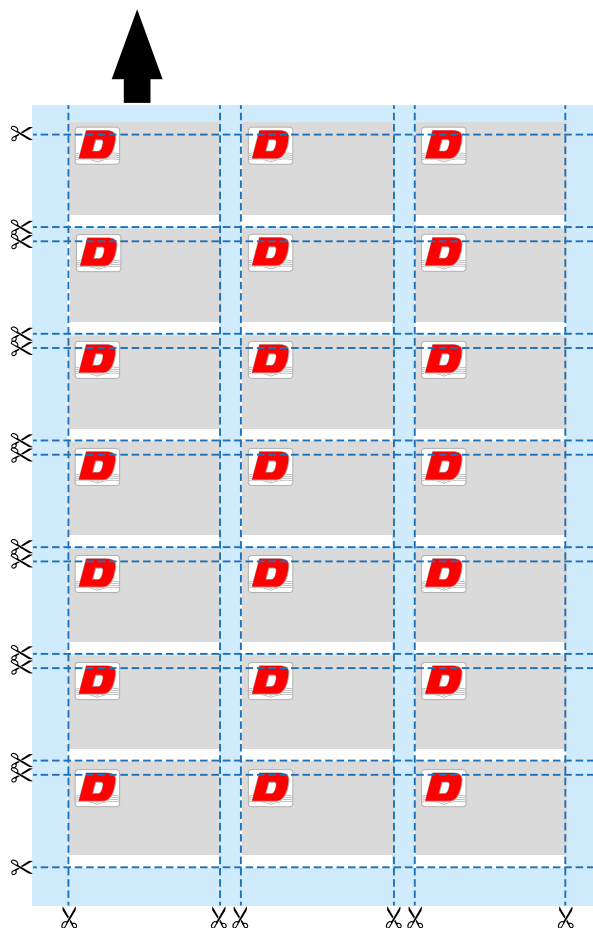


**CARD TOO SHORT**

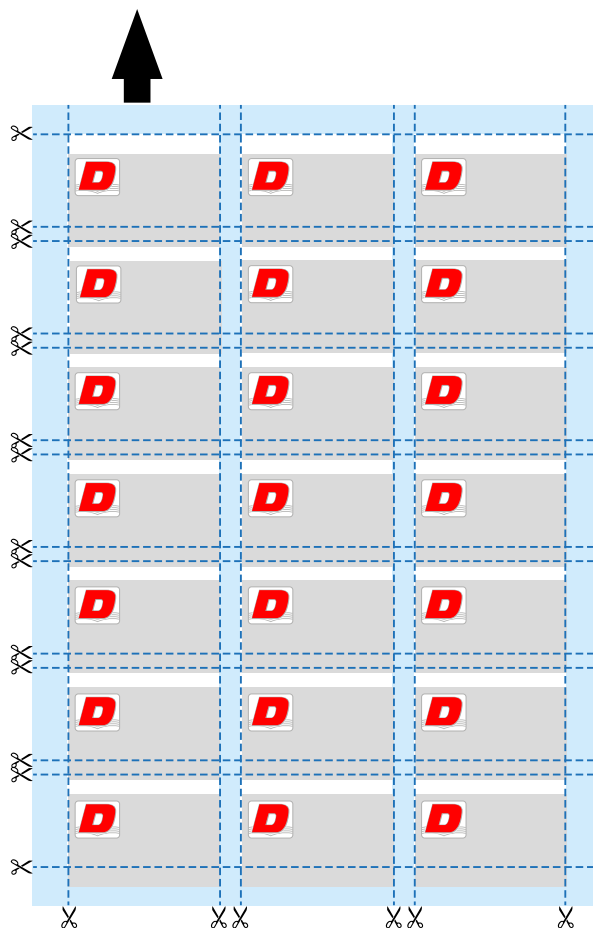




CUT SHIFT X UP



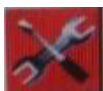
CUT SHIFT X DOWN





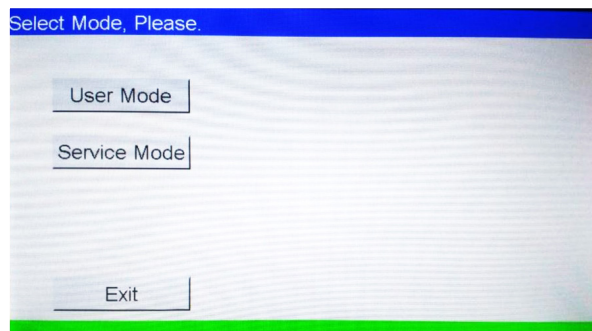


## SCREEN 15

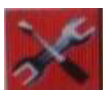


### User system settings

User selection of measurement mm or inch  
Double feed detection ON or OFF (default is ON)  
Screen brightness + or -



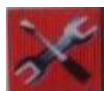
## SCREEN 17



### Technical menu access

The alphanumeric keyboard to enter the password for access to the technical menu.  
Note the same keyboard layout is used for giving a custom program its name

## SCREEN 18



### Mode selection

Screen to select the user or service mode  
Note service mode requires 6 digit password access



## SCREEN 19

### Service mode entry screen

Input mode = checking the sensors

Output mode = electro mechanical device run testing

Adjust mode = correcting and setting the cut and slit home positions

The input values are in terms of 1/1000th movement of the print on the sheet

### MECHANICAL SETTINGS

#### Infeed

#### Setting the tray upper limit knob 13

The knob is factory set to the correct position and should not need to be altered.

If the paper stops too high turn to the left.

If the paper stops too low turn to the right.

The adjustments are minute.

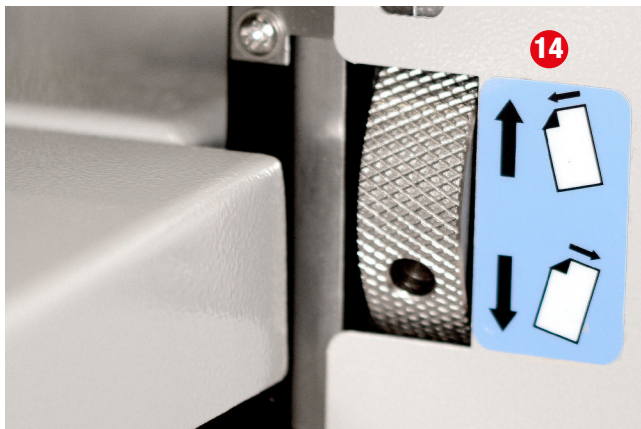
#### 14 Setting the skew knob See diagram D

The knob is set straight at the factory and should not need to be re set unless the paper is cut skewed

Basically if the paper is fed skewed to the right move the wheel so that the register plate orients to the left and vice versa.

There is a window with a marker indicating the central position and skew amount.

The adjustments are minute.



#### 17 Setting the air blast vent knob

The air amount should be just enough to get the top sheet lifted from the pile and a clean feed.

Too much air will cause the sheets to shimmy and loose infeed accuracy leading to poor cutting.

The air vents open progressively to adapt to different sheet widths.

The adjustment is minute.

#### 18 Setting the separator finger knob

The fingers need to be set so that only the top sheet will get by.

Clockwise closes the gap.

The adjustment is minute.

A too tight gap will lead to late or missed sheet feeds.

A too open gap will lead to double feeds.



### Gutter trim settings

Setting the gutter deflector knob **22**

On certain jobs the gutter deflector needs to be engaged to move the scrap to the waste bin.

The knob has 2 positions.

Down is activated.

Up is deflector off.

There is an interlock on the knob flag to tell the machine in which setting they are positioned.

### Silver pressure knob **24**

At the top of the front cover is a silver knurled knob.

This has 5 positions as marked by the pips; 1 is lowest and 5 is highest.

The knob will vary and set the pressure on the front side of the 2 last feed rollers in the slitting area nearest the blade and crease tool.

The setting requirement will vary with the following conditions.

- Paper thickness.
- Paper surface treatment un-calendered or calendered.
- Printed surface on the sheet , some printers use wax based toner that is more slippery.
- Cross cutting accuracy result.

Basically if the cross cutting is accurate then do nothing.

If the accuracy is not so good then you can try a harder setting to see if the grip improves.

Note that the pressure adjustment will not compensate for dirty rollers which must be perfectly clean to get the right grip, clean them each day.

### Interior mid roll pressure compensation knobs **25**

In the machine there are 2 pressure knobs in front of and behind the cross blade that will counteract the warp of the upper feed roll by adding pressure in the middle.

These are factory set and usually dont require any other adjustment.

If you see that the middle strip of cards is loosing grip then a slight increase ( clockwise )of the pressure may help compensate.

Do not over do it as you may mark the rolls and void the warranty.

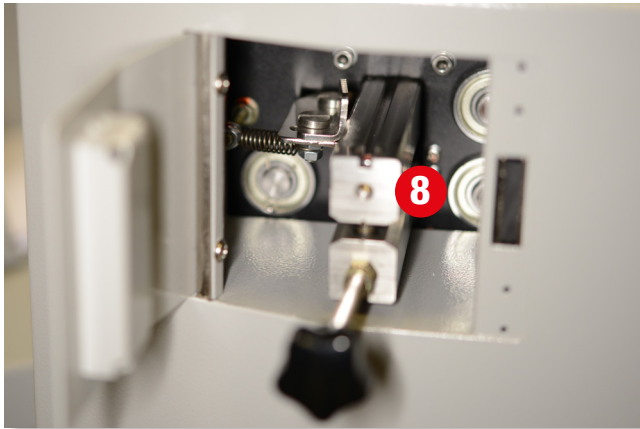
Note: the adjustment is minute 1/16 th turn is normally enough.



### Waste bin **26**

The waste bin collects the gutters and cross cut waste material.  
The bin will be full after about 3 hrs of full time use.  
Do not let the waste back up or the paper path will jam up.

### Finishing tools settings **8**



#### Fitting the slide in cross tools

Access via the door with interlock switch.  
Press the retaining clip to the right and withdraw the tool.  
To insert another tool the tool will need to be squeezed to fit into the slot.  
The clip will click when the tool is fully home, if the tool is not fully home a warning message will occur.  
The tools handle ensures a one way fitting and the tool cannot be fitted inverted or it would cause a jam.  
Linear tool works bottom up.

#### Setting the cross tools pressure

Done by the screen.  
There are also 3 pressure screws to balance the line depth across the sheet.  
These control the height and pressure of the tools on the paper.  
These screws are factory set and usually require no adjustment.  
If they need to be altered the increment is 1/10 of a turn on all screws equally and re-test on a new sheet.

#### Important :

If the depth is set too tight the gap will be too small and the paper will jam at the infeed to the bar.  
Note that the perf bar is thicker than the crease bar and the pressure bar will need to be set about 2 positions less on the screen.

### UNJAMMING

#### How to unjam the slitters

Use the reverse button to slightly disengage the paper from the head and pull the paper away, make sure no small pieces are trapped in the slitter.

*Note if the jam is very bad the upper slitter head may need to be removed to remove the scrap lodged in it.*

How to unjam the cross tools (usually an accordean style jam).

Use the reverse button to pull the paper back a little.

Pull the paper away.

### LINEAR TOOLS



### Setting the linear tools

Access is via the outfeed cover with interlock switch.

The **upper body of the tools** are screwed to the cross bar, note there are 2 alternate holes on each tool in case you are near the end of a slot.

The tool is positioned according to the mm scale and lining up with the dots on the body which indicate the blade centre line.

The **counter roller** is positioned centrally under the tool blade or the pip on the scoring wheel and lightly tightened using a 2,5 mm Allen key on the grub screws onto the flat of the output shaft.

*Note that over tightening the screws will distort the roller giving uneven pressure and mark the shaft.*

The upper tools are lowered to kiss the roller using the pressure screw.

*Only a very light pressure is needed, a heavy pressure will damage the roller and tool.*

### Slit tool setting

The slit tools blade flat edge will kiss the side of the counter roller.

*Note that in order to ensure that the cards run straight and true under the tools the tool should be positioned at the mid point of the card or the card may skew.*

### Helper rollers **28**

Rubber outfeed rollers should be set **equispaced on both sides of the linear tool** to ensure grip and straight feeding.

*Note that the outfeed rollers need to have sufficient grip to ensure the sheet is pulled from the crease tool and particularly the perfing comb or a infeed jam will occur.*

## LOWER ROLLERS

### Re-tooling the lower rollers

The output shaft can be withdrawn from the machine by:

- Removing the small spring clip **31**
- Sliding the shaft to the right by 2 cm and exposing the gear.
- Pulling the left side outwards by about 5 cm and sliding to the left to dislocate the bearing.

If you need to re- tool the shaft the end clip can be removed and the bearing slid off to allow the counter wheels to be slid off.

Refitting is the opposite procedure.

*Do not loose the spring clips as they are tiny !*

### Outfeed table

Setting the inclined outfeed table.

Take a sample of the final product and lay it on the tray.

Set the side guides and separators to about 5 mm of the sheet to give it room to slide in.

### Business card tray

#### Setting the business card tray

The outfeed table is to be set horizontally.

The tray is positioned to fit on the 2 pips and pushed against the end of the machine.

The deflectors are positioned to guide the card into the tray without hitting the guide.

*Note that when using narrow gutter the space between the cards is tight...*

The card side guides are slid into position using a trial card to ensure the correct setting, or the cards will catch on the guides back up and cause a jam.

The setting is minute.



### **Cross perfin tricks**

Doing a intermittent cross perf.

This is done by trimming the perf platen (self adhesive) and positioning it only in the area to be perfed using the mm scale.

### **Wear parts replacement**

Replacing the perf comb and other wear parts.

*Note that the perf parts will wear over time and the perforation quality will be compromised.*

It is not a solution to just add on pressure as this will cause paper jams.

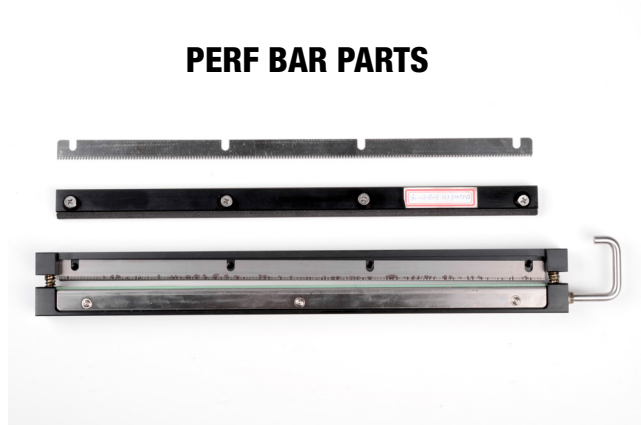
Also the platen will swell with injected paper scrap if the pressure is too high and block the paper path causing a jam.

### **The perf comb (see picture)**

Is held in place with several small screws.

Remove the screws, pressure plate and comb.

Reassemble with a new comb and make sure the comb is fully home.



### **The ejector pad**

Peels off ; be sure to scrape away any old adhesive.

Peel off the backing of the new pad and carefully lay in place.

### **The perf platen**

The platen is self adhesive.

Peel off the old one and clean off any old adhesive.

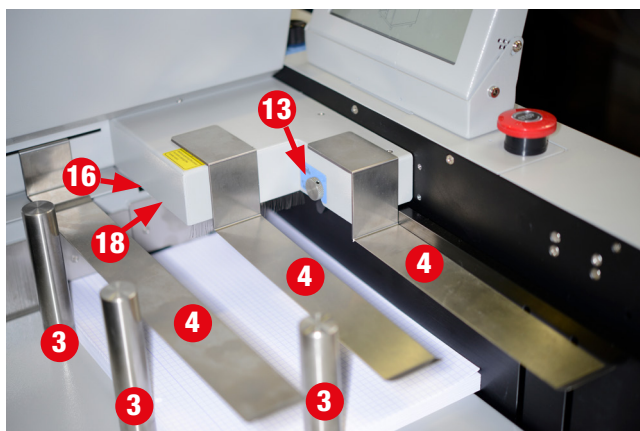
Lay down the new one and press firmly.

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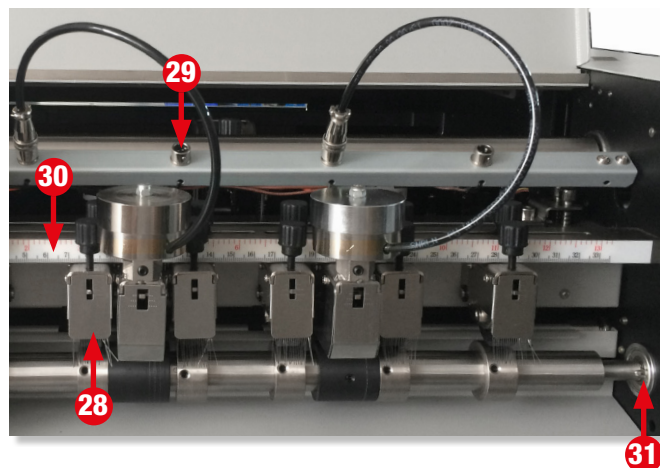
*Forbidden Reproduction*



**INFEED TRAY DETAIL**



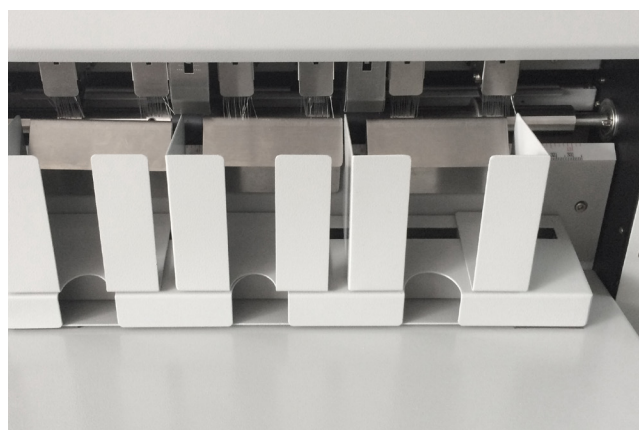
**INSTALLATION OF STRIKE PERF TOOLS**



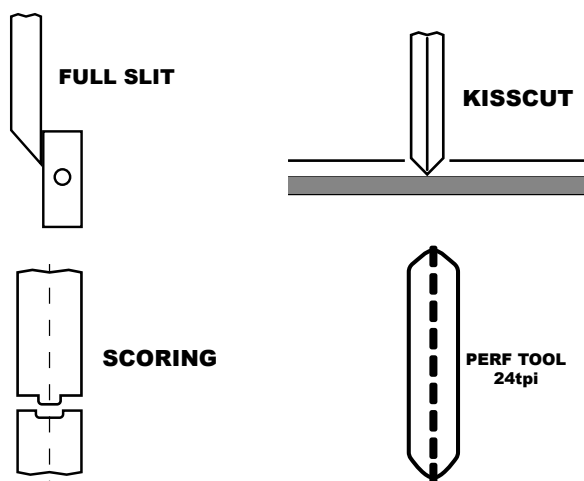
**OUTFEED TRAY**



**BUSINESS CARD TRAY**



**LINEAR TOOLS Diagram**





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