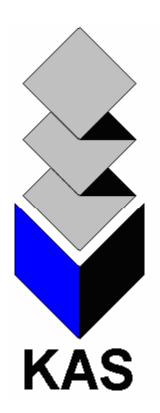
# CREASE MATIC AUTO 50



**Operators Manual** 

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#### Introduction

#### **Crease Matic Auto 50**

Designed and manufactured in the U.K., the new Crease Matic Auto 50 is a fully programmable high speed card creaser. Documents are suction fed and creased at up to 7000 sheets per hour. It is possible to crease Digital and Litho printed card, removing cracking that may occur at the folding stage.

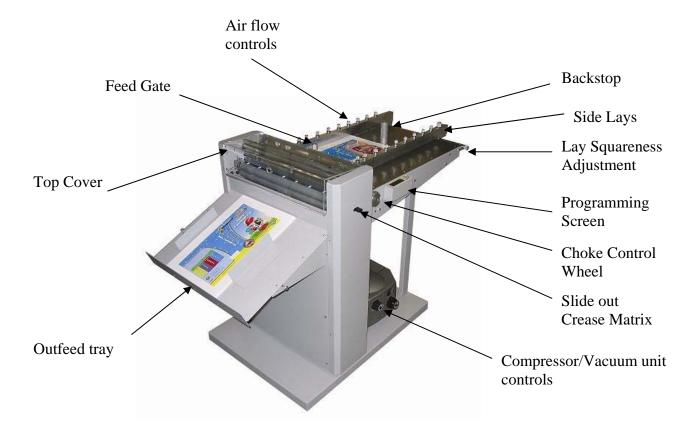
The CM Auto 50 is capable of accommodating stock from CD-SRA2 (500x700mm), with a capability to program a maximum of 29 creases per sheet anywhere along its length.

A maximum of 99 different jobs can be programmed and saved to the machines internal memory, making the selection and recall of common jobs quick and easy.

Jobs may be programmed in either Absolute or Incremental measurements and image shift adjustments can be made with one alteration.

The machine is supplied with rotary perforation that is adjustable across the width of the document, and four widths of slide-out and turn crease matrix as standard.

# **Machine Components**

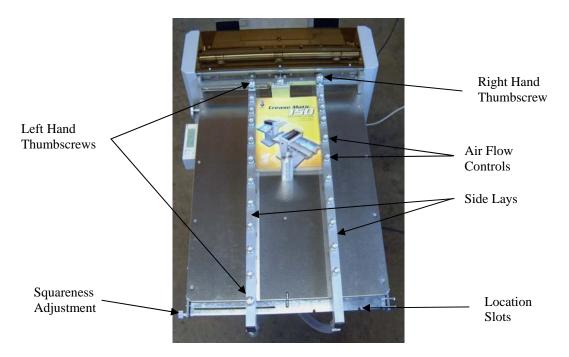


When installing the machine the supplied power cable should be plugged into the switched power socket on the machine and then to the power supply socket. Switch the machine on and the control screen should initialize. The compressor/vacuum unit has a separate on/off switch located under the Choke Control Wheel. This allows the unit to be switched off when not in use.

## **Setting Side Lays**

There are two side lays on the machine which sit at each side of the paper on the infeed section. Their purpose is to guide the paper under the feed gate and into the feed rolls accurately, to ensure a square crease is made across the document. They also supply air to the underside of the paper stack, by way of thin slots, in order to make the paper "float" before the bottom sheet is vacuum fed away under the feed gate.

On the CM Auto 50 there is also the capability to adjust the lays out of squareness to accommodate for non square crease lines, although this adjustment is minimal.

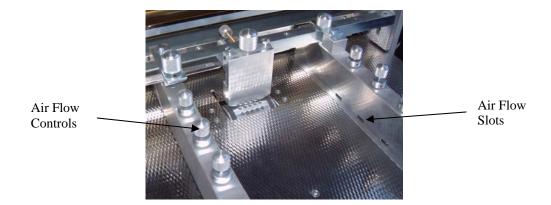


Firstly, ensure that the squareness adjustment is set to its central position by aligning the two marks on the machine bed.

The right hand side lay has four location positions. By removing the thumbscrews at the feed gate end, the lay may be extracted from one slot and repositioned in another, using the thumbscrew to secure it. This position must be selected with the paper size being fed in mind, in order to keep the feed gate as central as possible to the paper centre line.

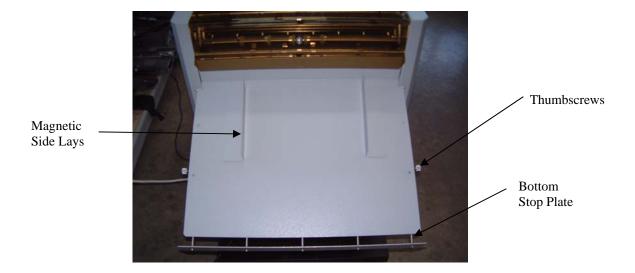
Once the right hand lay is in position, loosen the two thumbscrews at either end of the left hand side lay and with a single sheet in the machine, push it across to the correct width of document. The lays should not pinch the document and the paper must sit on top of the protruding edge at the base of the lay. Secure the thumbscrews when in position.

## **Setting Side Lays cont.**



Air flow to the slots is controlled using the thumbscrews running along the top edge of each lay. By screwing them down all the way the flow of air will be stopped. This should be done if the document does not cover the slots. Screwing them up will allow air to pass through the slot. The thumbscrews are fitted with antivibration devices, to prevent the settings from altering during normal operation. After placing the paper onto the machine, the magnetic backstop should be placed behind the stack to prevent it from moving.

# **Setting Outfeed Tray**

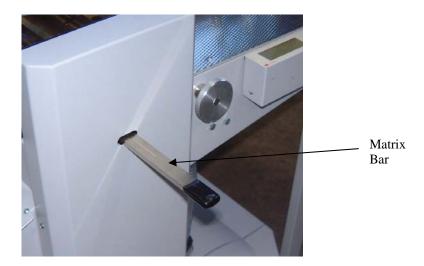


The outfeed tray has two thumbscrews, one on each side. By loosening the thumbscrews the bottom stop plate may be extended to allow larger sheets to be collected without damage.

The magnetic side plates may be positioned to keep fed documents stacked accurately.

The outfeed tray can be removed in order to adjust the lower perforation wheel shaft.

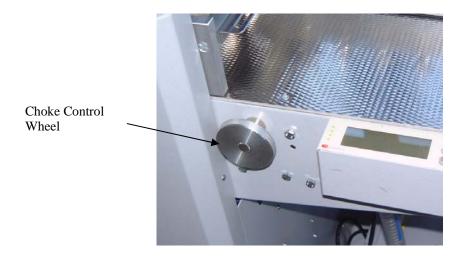
# **Changing Crease Matrix**

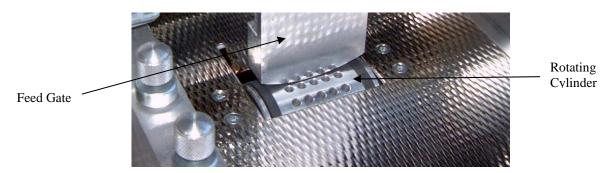


The machine is supplied with two crease matrix bars that have different widths of slot on either side. One of these slots allows the operator to use replaceable self adhesive matrix bars, the other three may be changed depending on the thickness of the material to be creased.

The bar must only be changed while the machine is in its rest position with the knife at its highest point. Withdraw the bar from the slot, turn or replace with the correct size slot, and slid the bar into the machine until it stops.

# **Choke Adjustment and Rotating Cylinder**





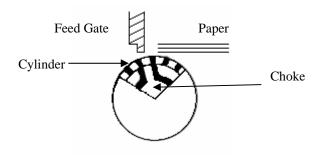
The choke is used to control the amount of vacuum applied to the front edge of the paper through the rotating cylinder holes.

The amount of vacuum needed is dependant on the type of paper being fed. Thin gauge paper, 80gsm to 90gsm will tend to wrap around the cylinder easier than thick gauge paper, and will need less vacuum to feed.

By rotating the choke control wheel clockwise, more area of slot inside the cylinder is exposed through the holes and so more of the front edge of the document is sucked onto the wheel.

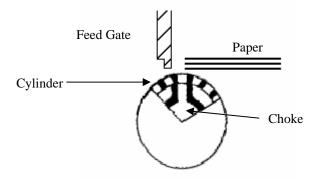
## Thin Gauge Paper Setting.

Rotate the choke adjustment knob anticlockwise until the slot inside the cylinder is tilted towards the feed gate. This adjustment may be fine tuned during operation.



## **Heavy Gauge Paper.**

Rotate the choke clockwise until the slot is in an upright position.



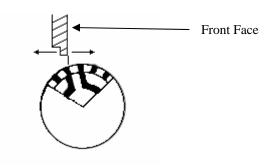
# **Feed Gate Adjustment**



The feed gate is set to allow only one document past at a time. This is achieved by altering the gap and position of the bottom edge of the gate to the rotating cylinder. There are two thumbscrew adjustments. One on top, to allow the vertical movement of the gate, and one under the top cover, to allow horizontal movement. Adjustment of the gate carried out along with adjustment of the choke.

#### **Horizontal Adjustment**

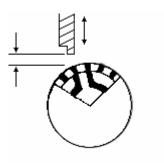
Firstly, set the choke to the correct position for the thickness of document about to be fed. Then, using the smaller thumbscrew, align the front face of the feed gate to the left hand edge of the choke slot, seen inside the rotating drum.



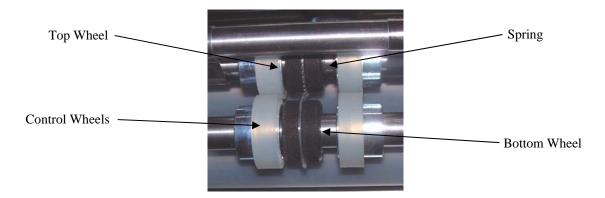
## **Vertical Adjustment**

The vertical adjustment is used to achieve the correct gap between drum and feed gate dependant on paper thickness being fed.

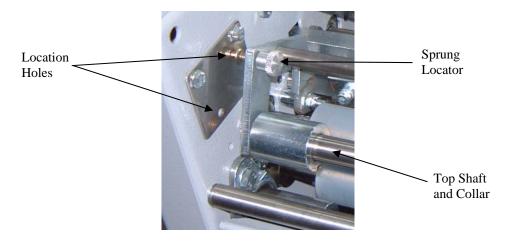
Place a stack of paper onto the machine feed table. With the machine and compressor turned on, adjust the vertical thumbscrew until only one document is taken from the base of the stack at a time.



#### **Perforation Wheels**



The perforation wheels are located under the top cover of the machine. The outfeed tray may be lifted clear of the machine in order to gain access to the lower shaft. By altering the position of the wheels along their shafts, perforations can be made at any point across the documents width. You can use the perforation wheels without needing to crease the documents. There are also feed wheels on these shafts, and it may be necessary to alter their positions to achieve the correct perforation position. To perform perforations away from the centre of the paper, the order of the feed wheels and perforation wheels on the shaft must be changed to maintain drive across the width of the document.



The wheels may be raised or lowered using the sprung locator to the left end of the top shaft. Two location holes allow easy positioning of the shaft in either the up or down position. The shaft must be in its up position to make any alterations to the perforation position. When lowering the top shaft, the perforation wheel must be pulled against the spring until it is located, so that the wheels are in contact when the spring is released.

#### **Top Shaft Alterations**



The top shaft must be in its raised position to be removed. It is removed by undoing the grub screw in the collar on the left hand end and sliding the collar to the right and out of the bush, allowing the end of the shaft to come towards you. It can then be removed from its location on the right hand side. The components on the shaft can then be loosened, slide off and repositioned in the desired order.

Note. The perforation wheel is positioned between two drive wheels and is sprung loaded. This arrangement must stay the same wherever you position the perforation wheel along the shaft.

All screws should be tightened onto the machined flat so that the shaft is not damaged. Refitting is the opposite of removing. Locate the right hand end of the shaft in the bush on the right side of the machine, line up the left hand side and slide the collar into the bush. Tighten the screw to secure.

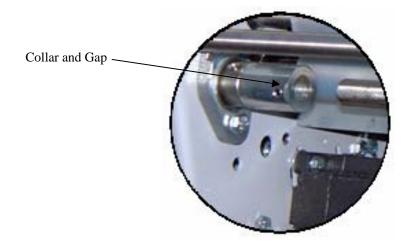
Accurate setting of this wheel can only be achieved when a test document is run, and final adjustments to measurements should be made at this stage.

#### **Bottom Shaft Alterations**



The bottom shaft can not be removed from the machine but can be slid across to allow components to be removed and repositioned.

Note. The drive wheels on the bottom shaft must stay in line with the wheels on the top shaft.



Undo the grub screw in the collar on the left hand end of the shaft. Slide the shaft to the right until there is a big enough gap near the collar to remove the drive wheels. Reposition the desired components opposite the wheels on the top shaft and tighten in position. Slide the shaft back into the collar and tighten the grub screw onto the flat. Accurate adjustments and alignment may be made with the top shaft down.

# **Compressor/Vacuum Controls**

The compressor/vacuum unit has two controls. The right hand control wheel increases and decreases the supply of air to the machines side lays. The left hand control alters the amount of vacuum supplied to the choke. This may need to be decreased when using light or thin paper.



#### Screen Sequence.

On switching on the machine the KAS logo will be displayed for a few seconds, this is to allow the main processor to power up. When this has completed its procedure the first screen will be displayed.

#### **Operator Run Screen**



The Operator Run Screen will be displayed under normal run conditions.

The screen shows us various pieces of information about the job being run at the time. It consists of four lines, and is controlled by the six buttons to the right of the screen. These buttons consist of UP, DOWN, LEFT, RIGHT, TICK and X.

Line 1 displays the speed that the machine is currently set to run at in the top left hand corner. This may only be altered while the machine is at rest by pressing the UP and DOWN arrows.

In the top right hand corner is the START prompt. To start the machine the green TICK is pressed.

Line 2 consists of ABSOLUTE and INCREMENTAL measuring. The LEFT arrow is used to switch between the two.

The RIGHT arrow is used to run a single sheet test. With the machine running, each time the RIGHT arrow is pressed a test sheet will be sent through the machine. This allows the operator to adjust the crease and perforation position before starting the main run.

Line 3 shows us the JOB number or program being run and the number of sheets that have been completed using that job number.

Line 4 has the SETUP prompt. Pressing the red X button takes us to the job selection screen.

#### **Job Selection Screen**

This screen allows us to choose the JOB or program we wish to run.

The Crease Matic Auto 50 has the capacity to store up to 99 different Jobs.



Use the UP and DOWN arrows to INCrease or DECrease the job number at the top of the screen.

When the correct job number has been reached, and the job has already been programmed, use the TICK button to confirm and save your selection. You will automatically be taken to the Operator Run Screen to commence your run.

If the job has yet to be programmed, press the RIGHT arrow (Next) to continue to the Programming Screen.

#### **Programming Screen**

This screen allows you to set up to 29 different positions of crease on each document.



Line 1 shows which crease line is being programmed and what its current value is in mm.

Line 2 shows the operator if they are working in Absolute or Incremental.

Line 3 shows which line of the current program is being worked on and what increments are being used, 1mm or 0.1mm.

To switch between increments, press the X button. It is advised that whole mm are programmed before tenths.

Line 4 has arrow functions, UP for Increasing the value, DOWN for Decreasing the value, LEFT to go Back to the previous screen and RIGHT to advance to the Next crease.

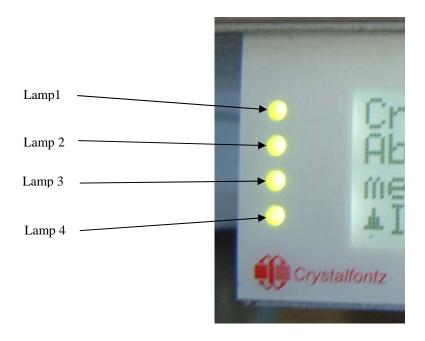
When the last crease position has been programmed, press the RIGHT button and then the TICK button to save the settings to memory.

The display will automatically return to the Operator Run Screen in order to commence the job. The sheet counter will also be reset to zero.

Alterations to a previously programmed job are achieved by indexing through the program until the required field is reached, changing the settings and saving the new settings.

#### **Warning Lamps**

There are four lamps situated to the left hand side of the control screen. Under normal run conditions they will be green. When an error occurs they will change to red.



#### Red Lamps

- Lamp 1- Programming screen is in engineers mode
- Lamp 2- Page overlength. Two or more sheets have been fed. Check feed gate, choke and vacuum settings.

#### Lamp 3- Page underlength

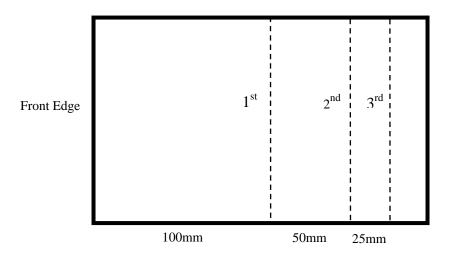
Lamp 4- Knife jam. This is caused when the knife is jammed in the down position More than one sheet has been fed or the incorrect crease matrix is fitted. The paper must be removed. It may be necessary to remove the crease matrix. Check feed gate settings and crease matrix size.

#### **Absolute and Incremental Programming**

The main difference between the two types of programming system is that Absolute measurements are taken from the leading edge of the document, and Incremental measurements are taken from the previous crease line.

#### Example.

A document requires three creases, the first is 100mm from the leading edge, the second is 150mm from the leading edge and the third is 175mm from the leading edge as shown below.



To program this job in Absolute, all of the measurements are taken from the front edge,

1<sup>st</sup> crease at 100mm 2<sup>nd</sup> crease at 150mm

3<sup>rd</sup> crease at 175mm

To program with Incremental measurements, the first distance is taken from the front edge, the second is taken from the first crease, and the third from the second crease.

1st crease at 100mm

2<sup>nd</sup> crease at 50mm

3<sup>rd</sup> crease at 25mm