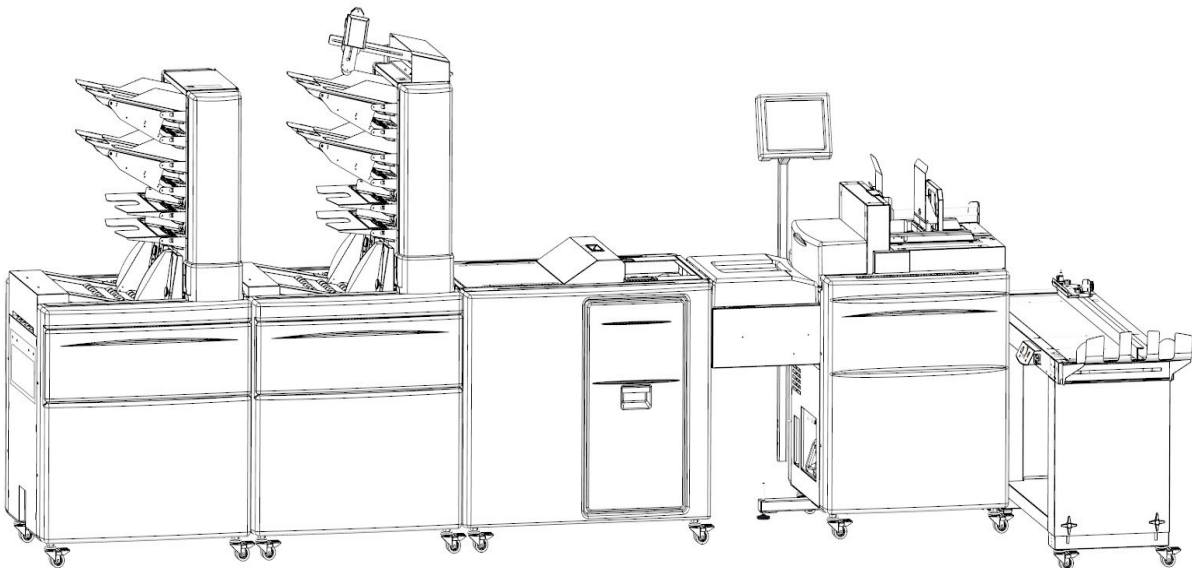


Relay9000

MAIL INSERTING SYSTEM

Operating Instruction



NOTE:

In this manual, the modules will be referred as:

| Relay9000 | Module Description |
|-----------|--------------------|
| F9ZA | DMI INSERTER |
| F652 | AC ACCUMULATOR |
| F653 | MF MAILFEEDER |
| F654 | TF TOWERFEEDER |
| F655 | BF BOOKLETFEEDER |
| F656 | BST BELTSTACKER |
| F657 | MFF FOLDER |

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 **WARNING:**

- **Electromagnetic compliance:**
 - **This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.**
 - **The product (System) which is connected to this machine will be class A.**

 **Note**

The domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m of the apparatus concerned.

Introduction

This manual contains instructions on the operation and maintenance of this machine. To get the maximum versatility from this machine all operators should carefully read and follow the instructions in this manual. Keep this manual in a handy place near the machine.

Please read the Safety Information before using this machine. It contains information related to USER SAFETY and PREVENTING EQUIPMENT PROBLEMS.

How to read this manual

Notation conventions

Whenever necessary, the following points for attention are indicated in this manual.

WARNING:

Indicates a potentially hazardous situation which, if instructions are not followed, could result in death or serious injury.

CAUTION:

Indicates a potentiality hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to machine or property.

Note

This sign refers to:

- Remarks for making the operation much easier. You get practical hints or knowledge to assist you in the machine operation such as:
 - Preparations required before operating
 - How to prevent papers from being misfed or damaged
 - Precautions required or actions to take after misoperation
- Limitations like numerical limits, functions that cannot be used together or conditions, under which a particular function cannot be used or obtained.
- Information.

[]

Keys that appear on the machine's display panel.

Safety Information

When using this machine, following safety precautions should always be followed.

Safety during operation

WARNING:

- To avoid hazardous situations like for instance electric shock or danger while exposed to moving, rotating or cutting devices, do not remove any covers, guards or screws other than those specified in this manual.
- Turn off the power and disconnect the power plug (by pulling the plug, not the cable) if any of the following conditions exists:
 - You drop objects or spill something into the equipment.
 - You suspect that your equipment needs service or repair.
 - Your equipment's covers has been damaged.
 - You notice unusual noises or odours when operating the equipment.
 - If the power cable or plug becomes worn out or otherwise damaged.
 - Before cleaning and care (unless otherwise specifically instructed).
- Electromagnetic compliance:
 - This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
 - The product (System) which is connected to this machine will be class A.

General safety

WARNING:

- Always connect the equipment to a properly grounded power source (wall outlet). If in doubt, have the power source checked by a qualified electrician.
- Improper grounding of the equipment can result in electrical shock. Never connect the machine to a power source that lacks a ground connection terminal. This machine is destined for specific purpose only. Any use going beyond this specific purpose is regarded as beyond the determination. The manufacturer will not be liable for damages resulting from any use beyond the determination, unallowed operation, respectively. The user alone bears the risk.
- Do not make arbitrary changes or modifications to the machine. The manufacturer will not be liable for modifications made at the machine on your own and damages resulting thereof. EC declaration of conformity and the mark CE will be invalidated, if you make changes at the machine or at the individual components.
- Do not override or bypass electrical or mechanical interlock devices.
- The machine is to be used only by authorized and instructed persons. The responsibilities on operating the machine have to be strictly laid down and observed so that there are no unclear competence regarding safety aspects.
- Vent holes serve for air circulation to protect the machine from overheating. Make sure that the holes are not covered.
- Do not expose fingers or other parts of the body to moving, rotating or cutting devices such as for instance between upper and lower trimmer knives.
- Always locate the equipment on a solid support surface with adequate strength for the weight of the machine.

General safety, continued

CAUTION:

- The machine and its peripherals must be installed and maintained by a customer service representative who has completed the training course on those models.
- Always follow all warnings marked on, or supplied with, the equipment.
- When you disconnect the power plug from the wall outlet, always pull the plug (not the cable).
- Disconnect the power cord before you move the machine. While moving the machine, always exercise care and make sure that the power cord will not be damaged under the machine.
- Always contact service if relocating the equipment.
- Do not move the machine while the machine is running.
- Do not open covers while the machine is running.
- Do not switch of the power while the machine is running. Make sure the machine cycle has ended.
- Lay the power cord in a way that nobody will stumble over it. Do not place things on the cord.
- Never attempt any maintenance function that is not specifically described in this documentation.
- Always keep magnets and all devices with strong magnetic fields away from the machine.
- If the place of installation is air-conditioned or heated, do not place the machine where it will be:
 - Subject to sudden temperature changes.
 - Directly exposed to cool air from an air-conditioner.
 - Directly exposed to heat from a heater.
- If the machine is not used over an extended period of time it should be unplugged to prevent damage in the case of overload.

Note

- The indications like front and rear, left and right refer to the paper transport direction.
- The operator manual always has to be available at the place of use of the machine.
- In the interest of technical development the company reserves the right to make alterations to specifications without prior notice!

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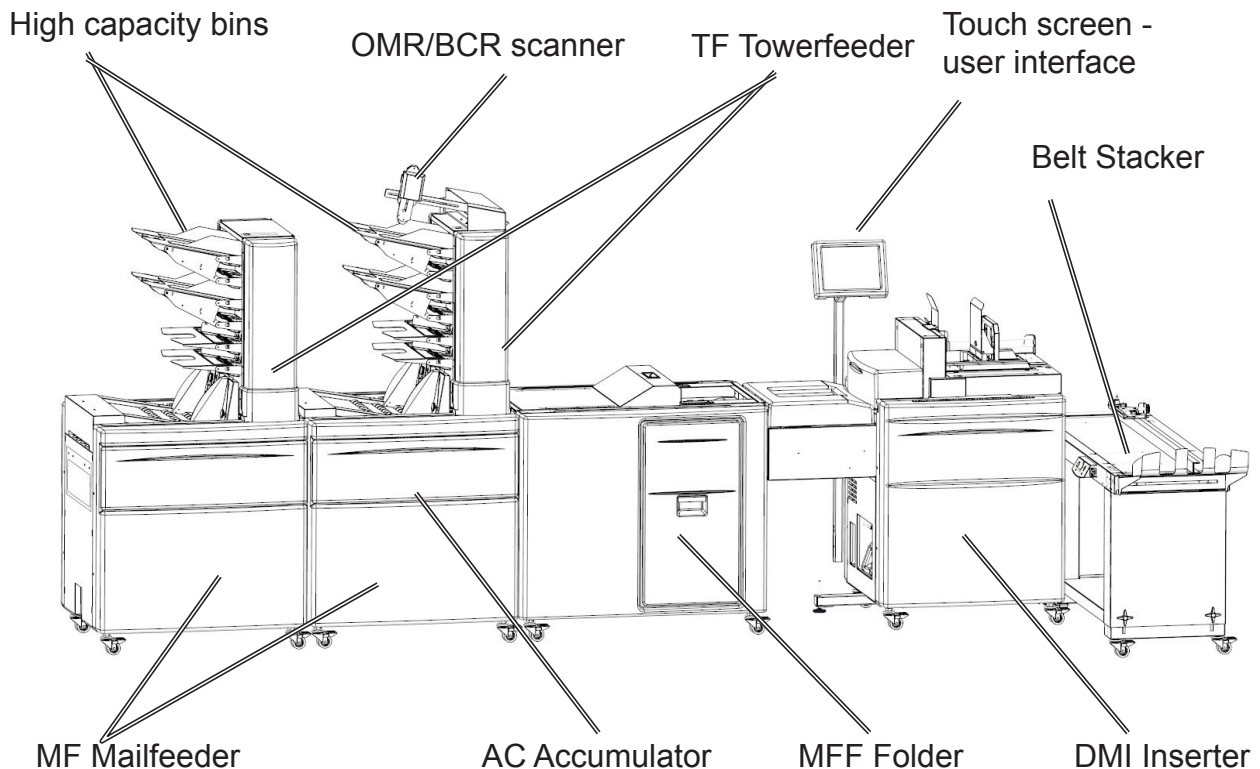
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What You Can Do With This Machine



The DMI Inserter, MFF Folder and MF Mailfeeders, form a direct mail inserting system. DMI is the inserting and sealing unit of the system. MFF is a multi function folder that can do half-, C-, Z-, and double fold of 1 - 10 sheets. MF are the feeding units of the system and can feed from up to seven sources in each unit.

The (single or rightmost) MF Mailfeeder is equipped with at least one of the following separately delivered modules: The TF Towerfeeder, the BF Bookletfeeder and the AC Accumulator. The Accumulator module AC receives material from an external feed source and merges it with the material from the Tower and Bookletfeeder. The AC makes it possible to run the system with a upstream device such as a secondary mail feeder. Contact your sales representative for currently available configurations.

The mail inserting system has a capacity to handle booklets with a thickness up to 8 mm ($\frac{1}{3}$ ") and envelopes filled to a thickness up to 12 mm ($\frac{1}{2}$ ").

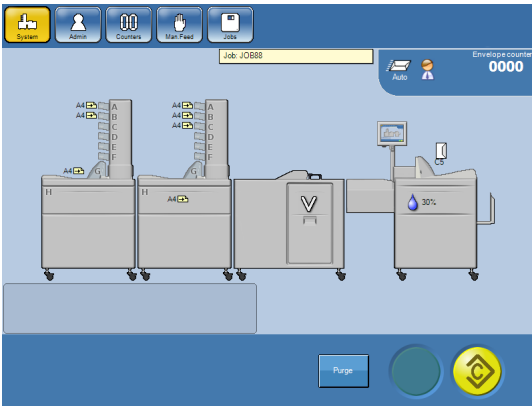
The system comes standard with a Intuitive touch screen User Interface that graphically visualizes and facilitates set up and adjustments.

Both OMR - Optical Mark Recognition/reading and BCR - BarCode Recognition/reading (optional) is available. The code interpreting facility in the system is completely flexible and programmable to match any code and ensures individual handling of each set and guarantees the integrity of each sheet fed.

NOTE:

In this manual, the modules will be referred as:

The system is controlled from a display mounted on the Inserter. The display is of touch screen type and will allow you to easily set up, adjust and operate the complete system.



To reach or actuate a certain function, simply point at an area on the screen showing a button, a machine or setting.

In this screen, pressing the Jobs button takes you to the Jobs screen. If you instead point at the Inserter you will reach the Inserter screen.

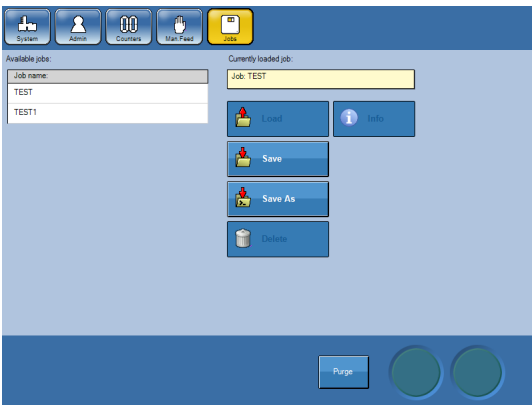
At the bottom you can see a yellow button. That is the [Calibration/Trial run] button. Press that button to perform a calibration/trial run. The trial piece produced will verify that the system is setup as you desired.



After a successful calibration/trial run, the green [Start] button will be available.

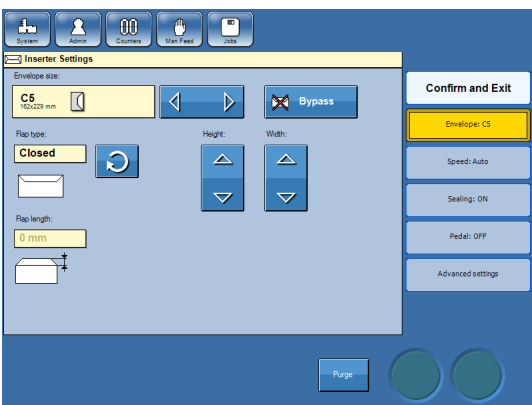


When the system runs, the red [Stop] button is available.



This example shows the Jobs screen. Here you can load, save or delete jobs.

Functions not available are greyed out. In the example you can only press the [Save] and the [Save as] button.



This example shows the Inserter screen. From here you can setup the Inserter. Choose envelope type, flap type etc.

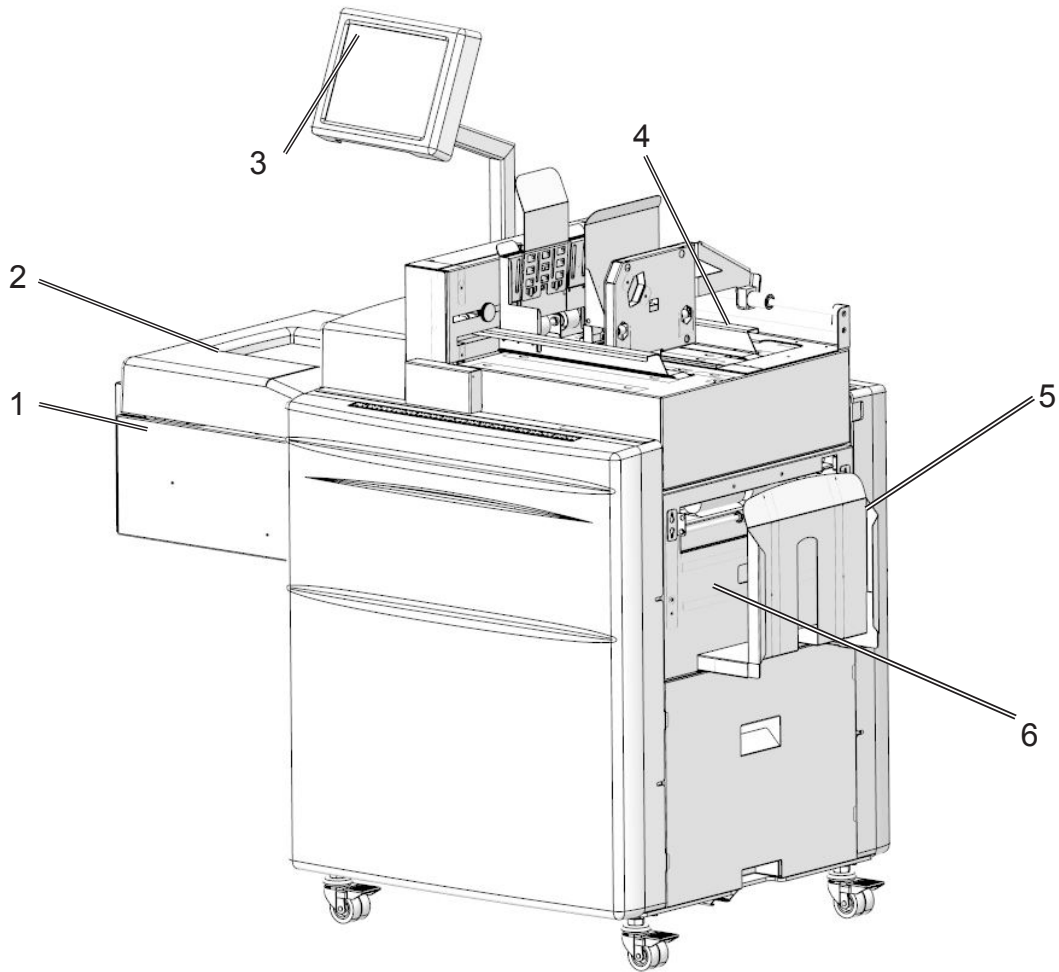
There are two types of arrow buttons.

The pointed arrow buttons means that you can choose between several different settings from one end of the list to the other.

The loop arrow button is used when you can choose between open or closed flap.

Guide To Components

Inserter

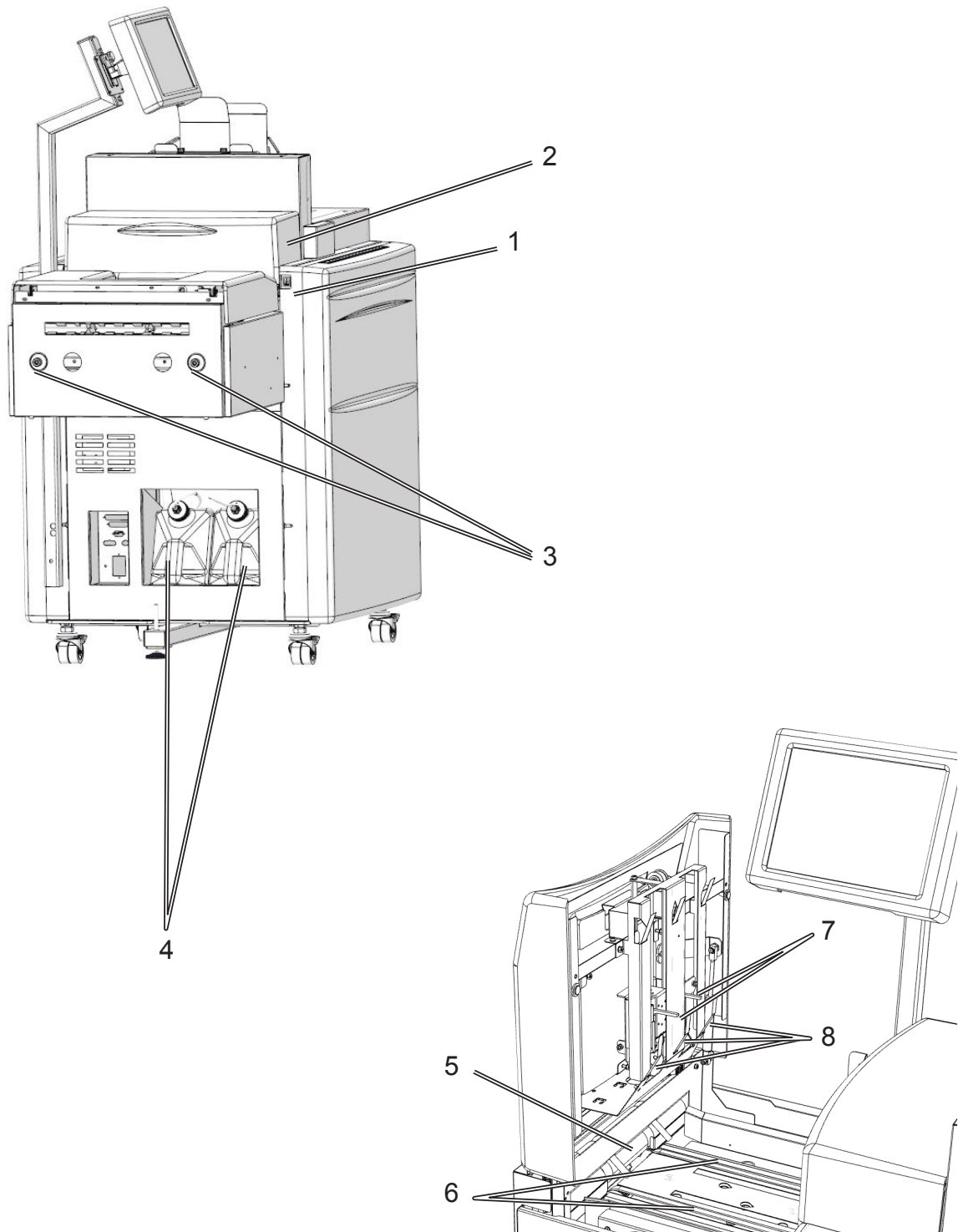


- 1 Infeed deck
- 2 Infeed deck cover
- 3 Control Panel/User Interface

- 4 Envelope Feeder
- 5 Stacker Tray
- 6 Sealing module

Continued on next page.

Inserter, continued

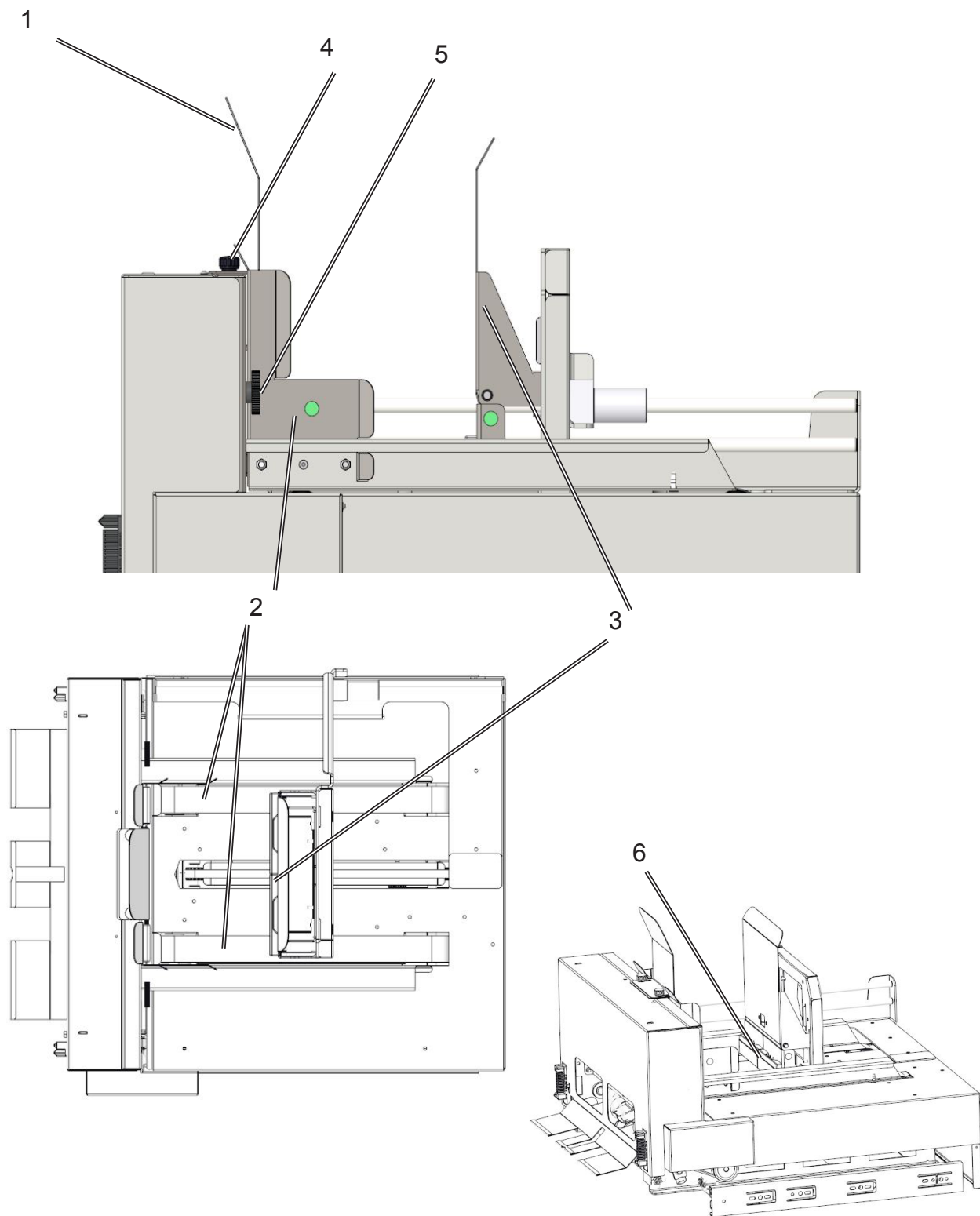


- 1 Power switch
- 2 Top Cover
- 3 Docking brackets
- 4 Fluid bottles

- 5 Infeed rollers
- 6 Infeed belts
- 7 Infeed stoppers
- 8 Guide tongues

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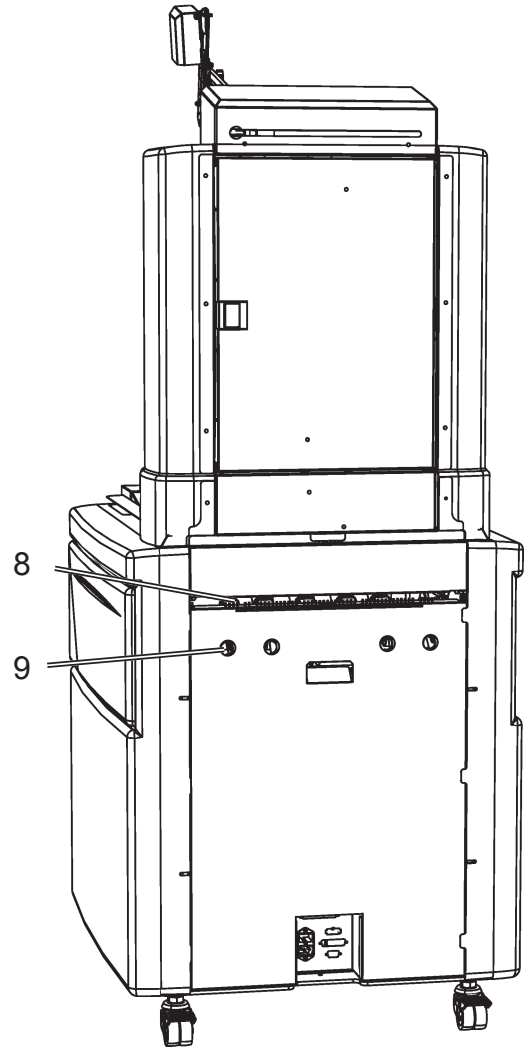
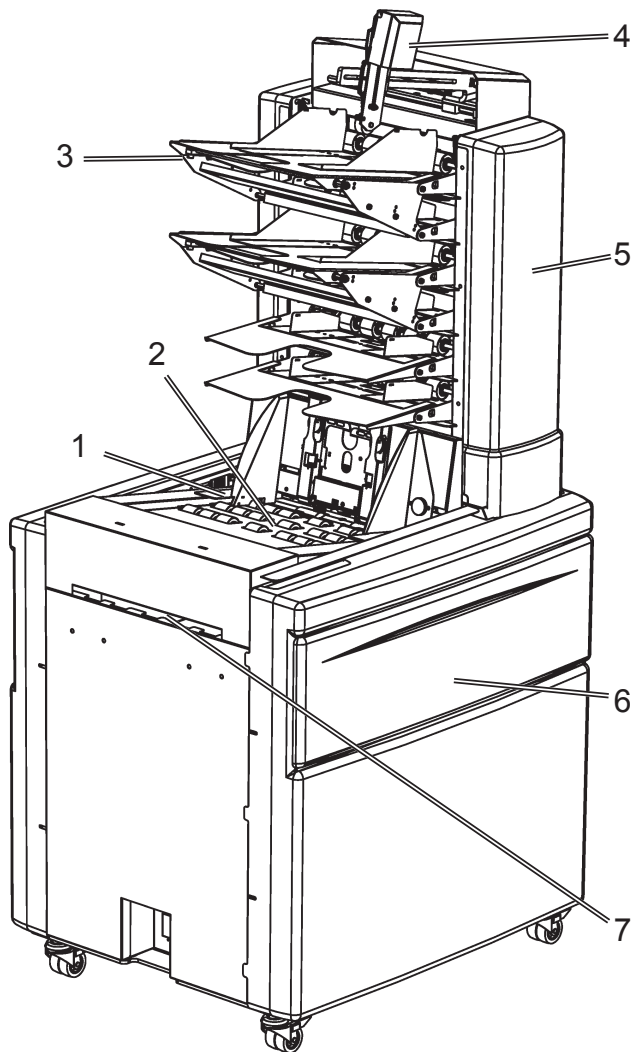
Inserter, continued



- 1 Envelope front wall
- 2 Envelope side guides
- 3 Envelope back wall

- 4 Front wall adjustment screws (x2)
- 5 Side guides adjustment screws (x2)
- 6 Back wall spacers (x2)

Mailfeeder



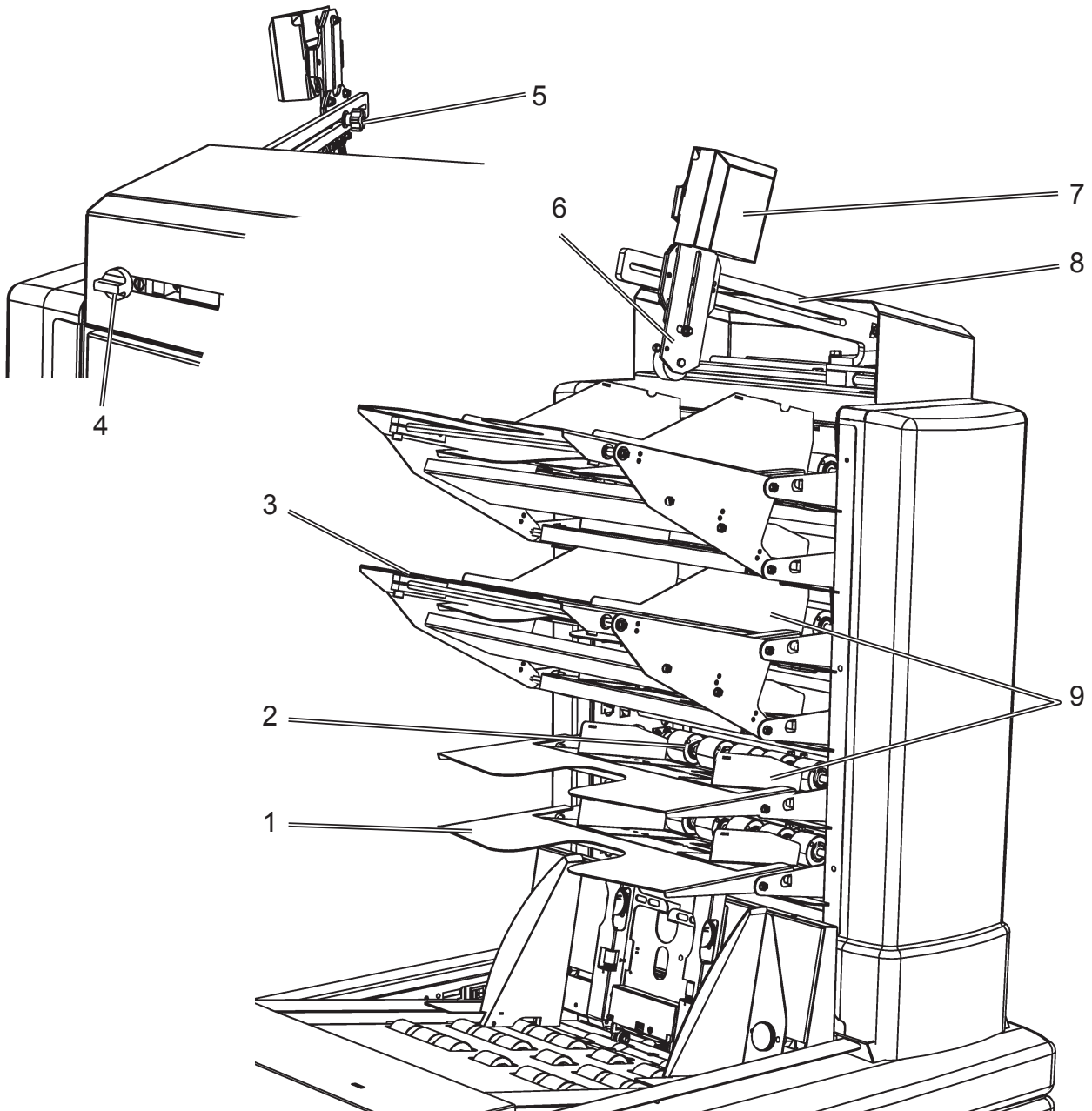
 **Note**

The direction indications refer to the paper transport direction.

- 1 Power switch
- 2 Bookletfeeder module
- 3 High capacity bin (optional)
- 4 Scanner (optional)
- 5 Towerfeeder module

- 6 Hatch
- 7 Accumulator
- 8 Outfeed slot
- 9 Docking

Towerfeeder



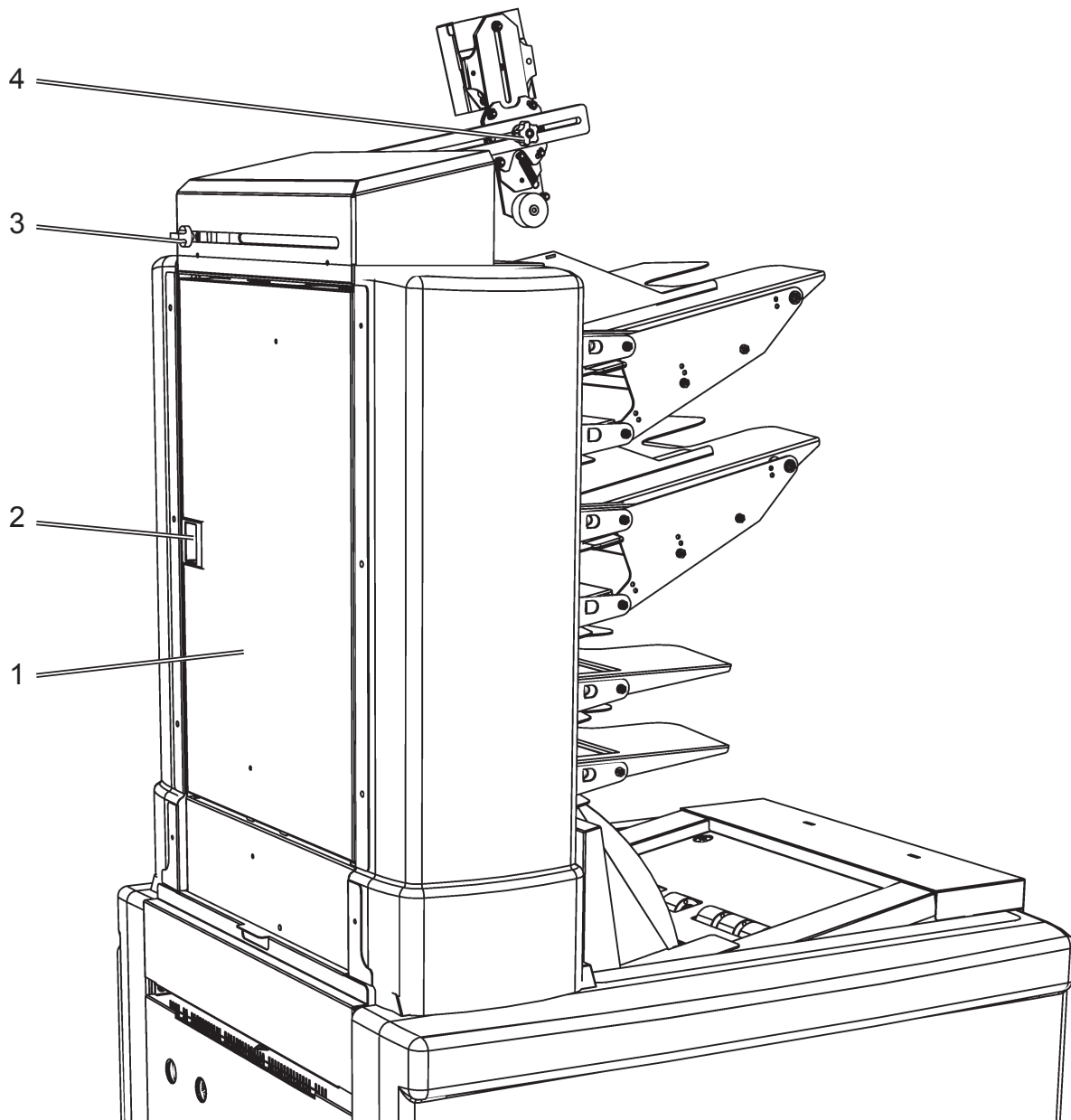
- | | | | |
|---|----------------------------|---|-----------------|
| 1 | Bin extension plate | 6 | Scanner bracket |
| 2 | Feed rollers | 7 | Scanner |
| 3 | High capacity bin | 8 | Scanner arm |
| 4 | Scanner arm lock screw | 9 | Side Guide |
| 5 | Scanner bracket lock screw | | |

 Note

The scanner, the high capacity bins and mounting accessories are optional. The scanner is installed on the primary Mailfeeder.

Continued on next page.

Towerfeeder, continued

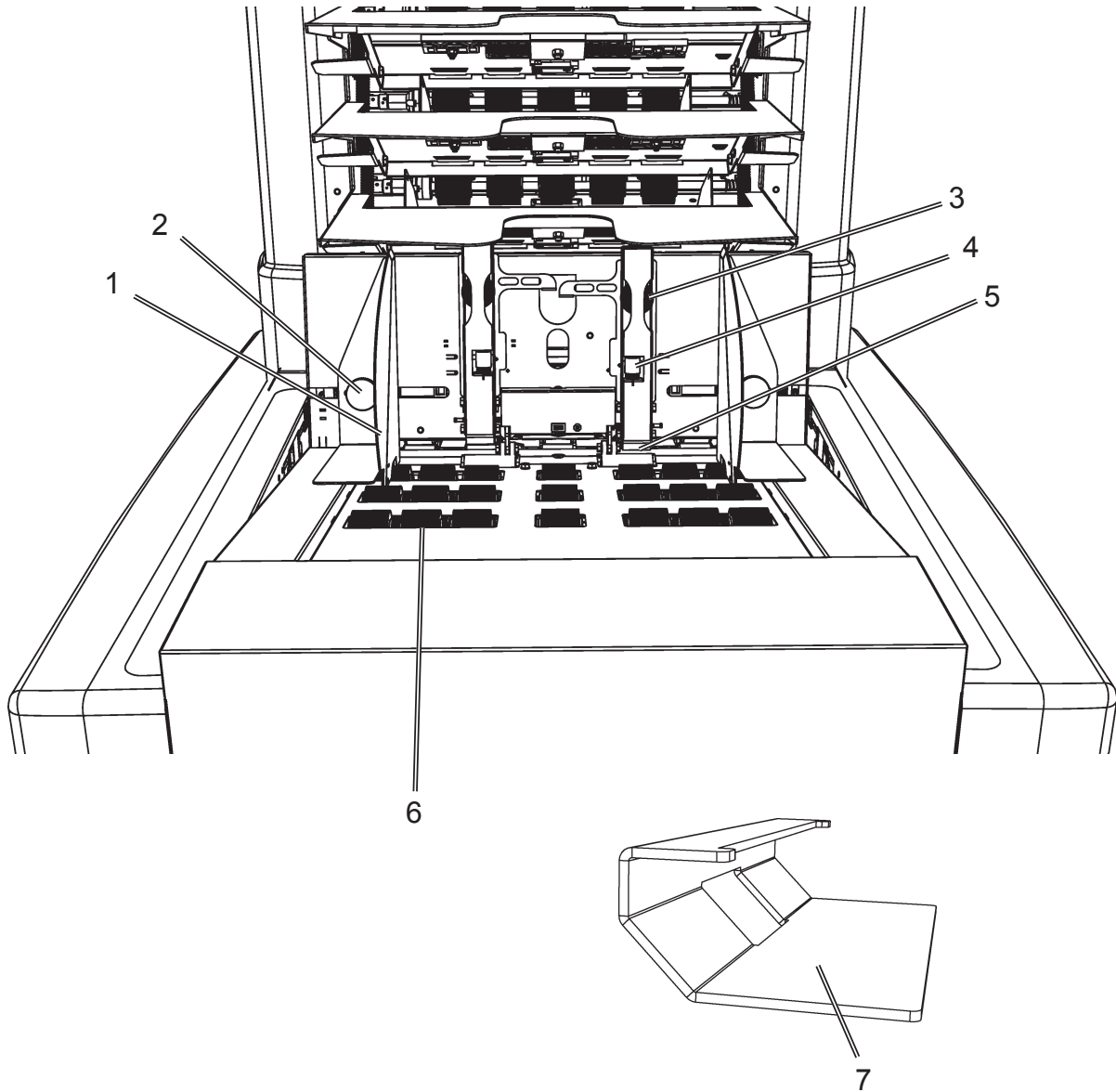


- 1 Towerfeeder door
- 2 Towerfeeder door lock
- 3 Scanner arm release knob
- 4 Scanner bracket release knob

 Note

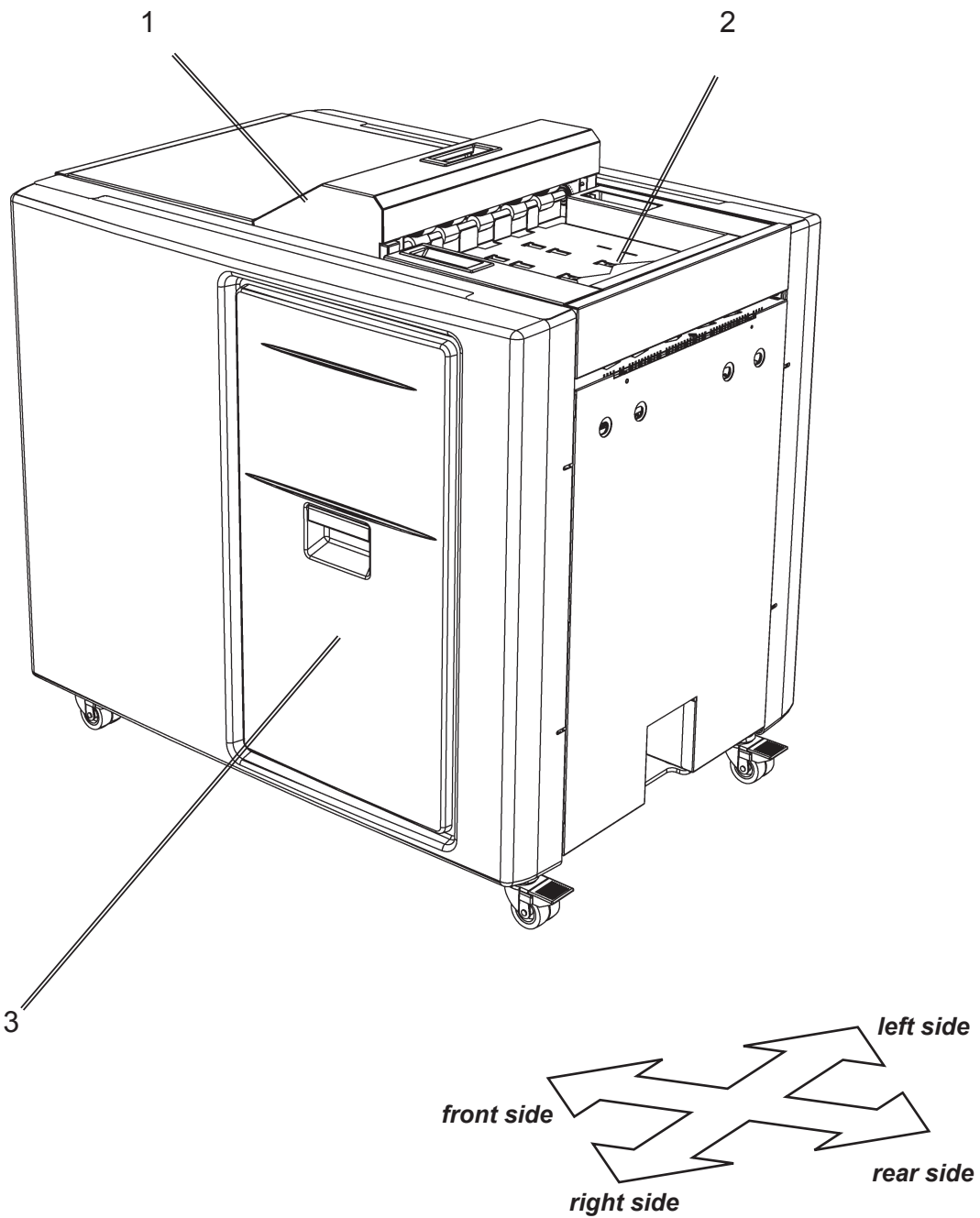
The scanner, the high capacity bins and mounting accessories are optional. The scanner is installed on the primary Mailfeeder.

Bookletfeeder



- | | | | |
|---|-----------------------------------------|---|------------------------|
| 1 | Booklet side guides | 5 | Booklet separator pads |
| 2 | Booklet side guides fixation knobs | 6 | Booklet feed rollers |
| 3 | Booklet separator pads adjustment knobs | 7 | Extra weight |
| 4 | Separation fine adjustment screw | | |

Folder



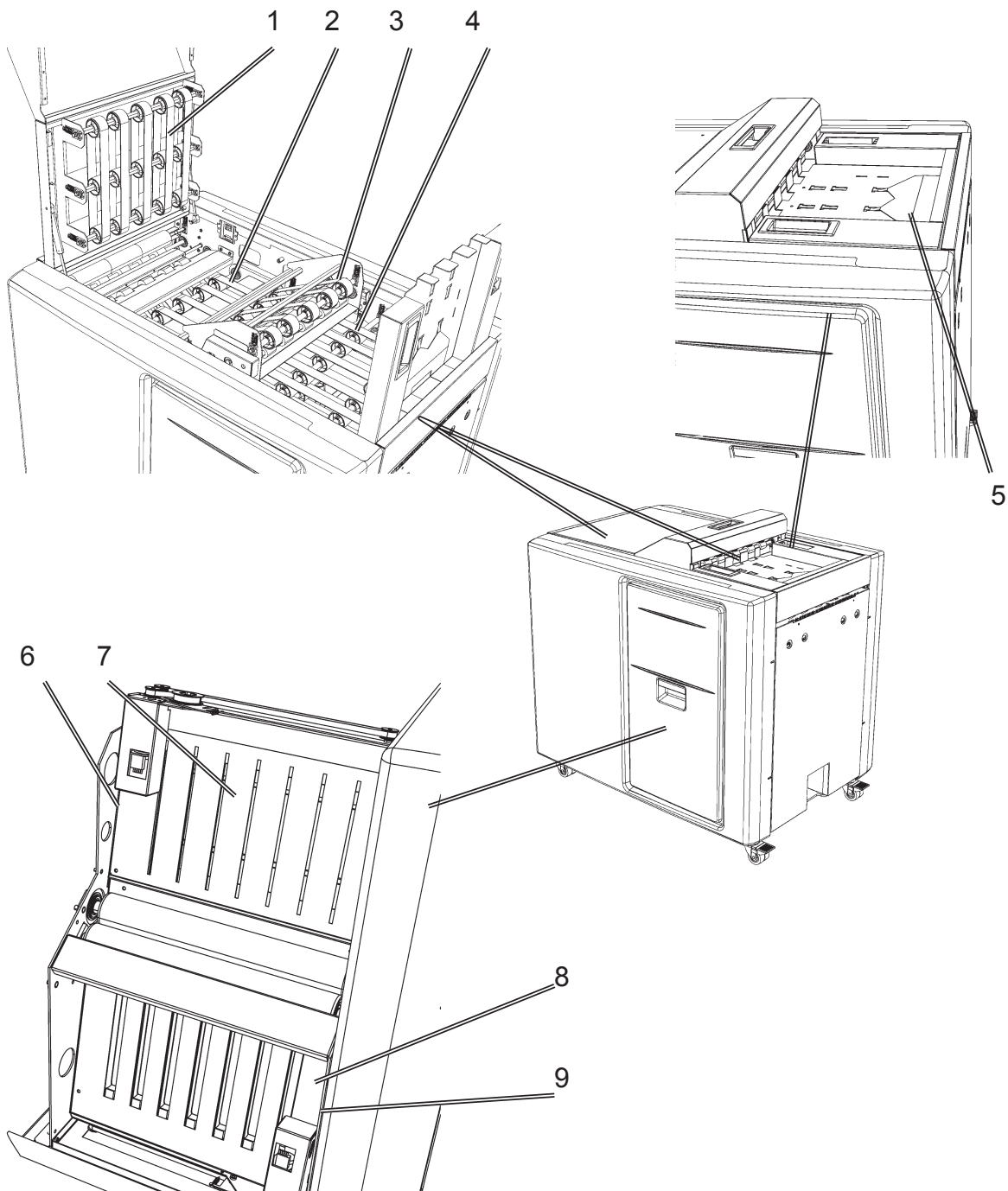
- 1 Top cover
- 2 Outsorth bin
- 3 Fold pocket cover



Note

The direction indications refer to the paper transport direction.

Folder, continued



- 1 Upper transport belts
- 2 Lower transport belts
- 3 Outsort transport belts
- 4 Bypass transport belts
- 5 Outsort bin paper guide

- 6 No. 2 fold pocket connector
- 7 No. 2 fold pocket
- 8 No. 3 fold pocket
- 9 No. 3 fold pocket connector

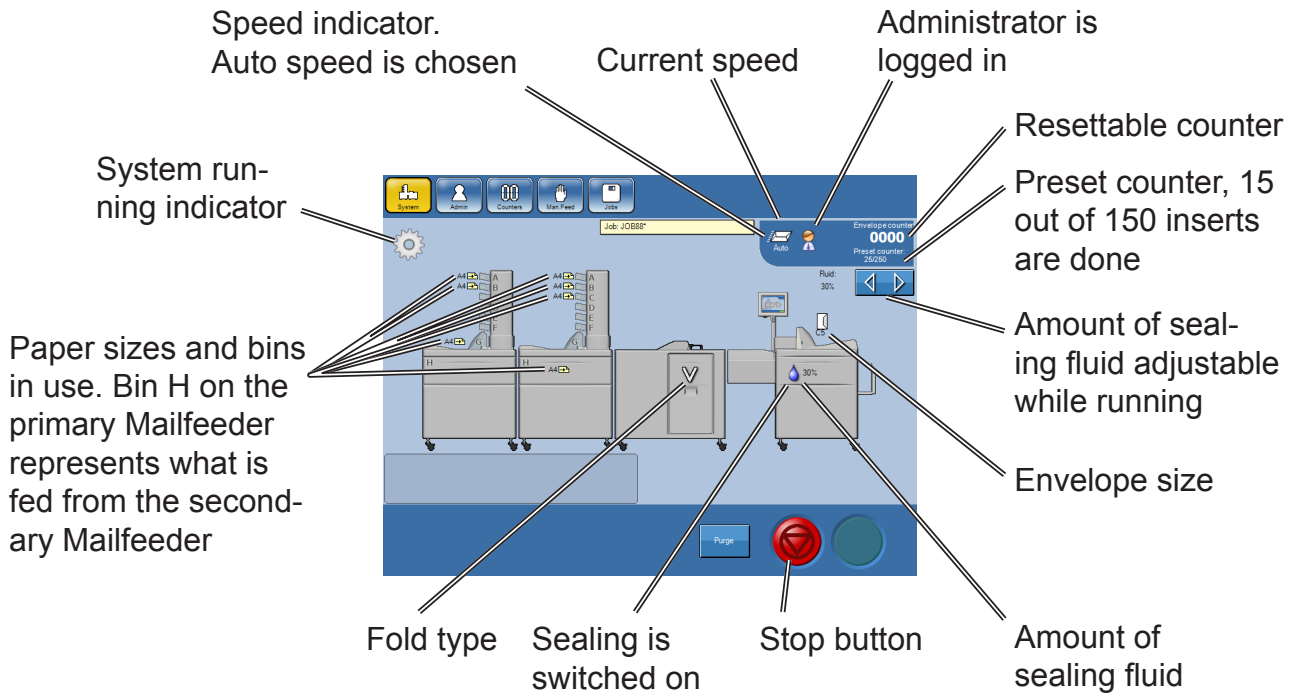
Note

No. 1 fold pocket and connector, located behind No. 3 fold pocket, is not visible in picture but is similar to fold pockets No. 2 and 3.

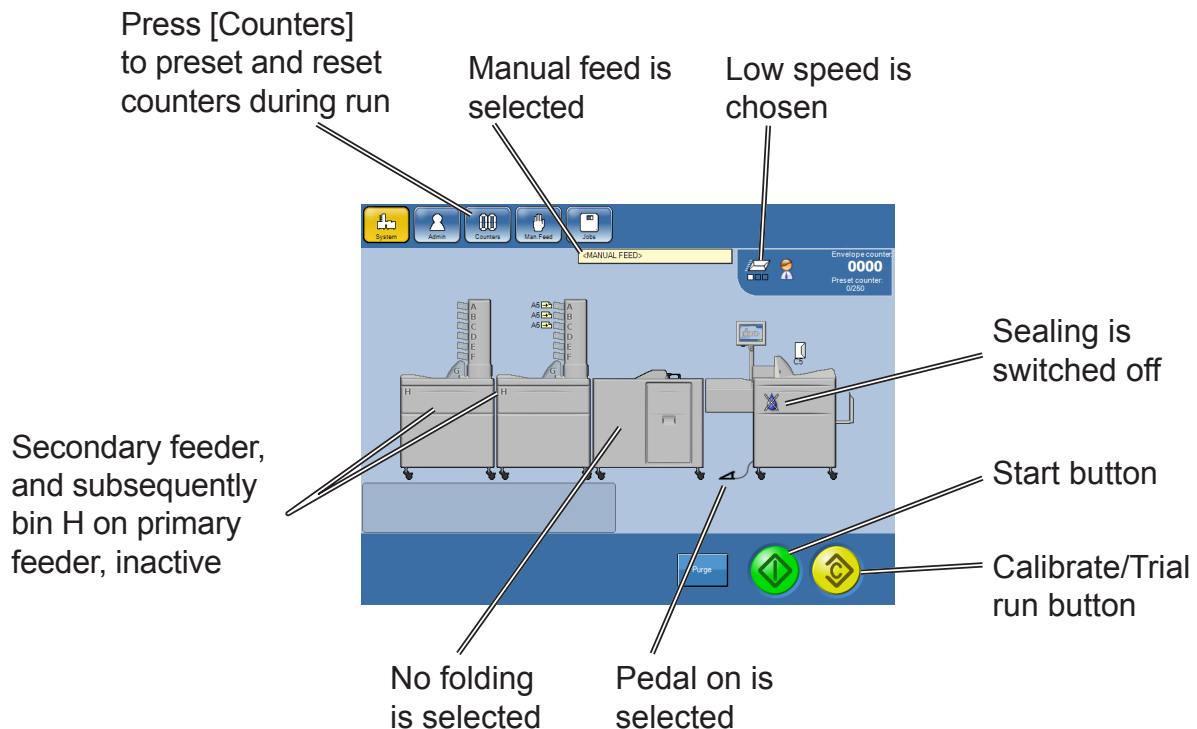
User interface

The Run menu screen is shown while inserting. Symbols and information are explained below, for more information see section **4 Settings**.

Machine running



Machine not running

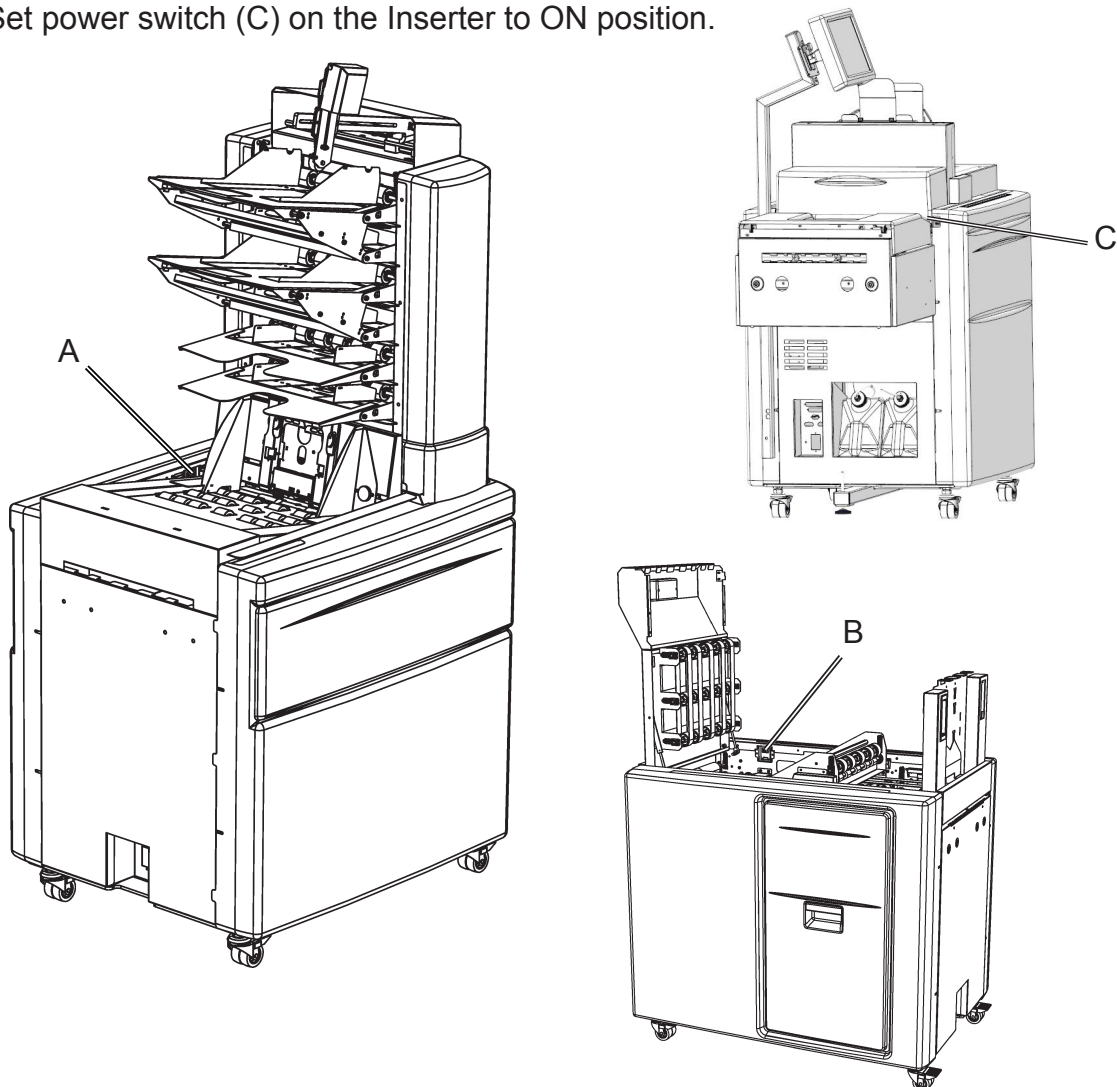


1. Basics

Turning On/Off the Power

Mailfeeder(s), Inserter and Folder

- 1 Plug the power cords into the wall outlets.
- 2 Set power switch (A) on the Mailfeeder(s) to ON position.
- 3 Set power switch (B) on the Folder to ON position.
- 4 Set power switch (C) on the Inserter to ON position.



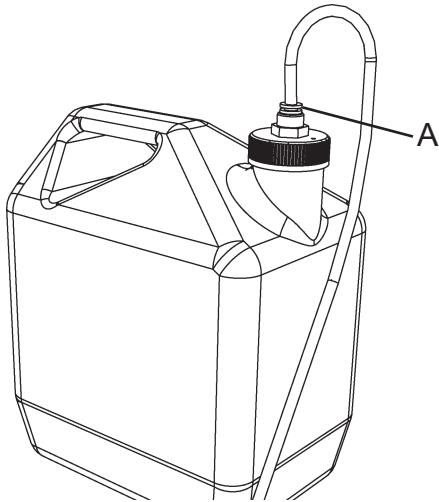
Note

If the system is switched off and the on again, all settings remain and the job can be started without a performing a new calibration. If the job you were running included OMR/BCR reading, the settings remain but the OMR scanner has to be switched on again, see OMR after power off/on or BCR after power off/on in section **4 Settings**.

Fill/Refill/Empty Sealing Fluid

The fluid containers

The system has two fluid containers, one for fresh sealing fluid (green marked) and one for waste fluid (red marked).



Removal:

Lift out the container and unscrew the cap.


Installation:

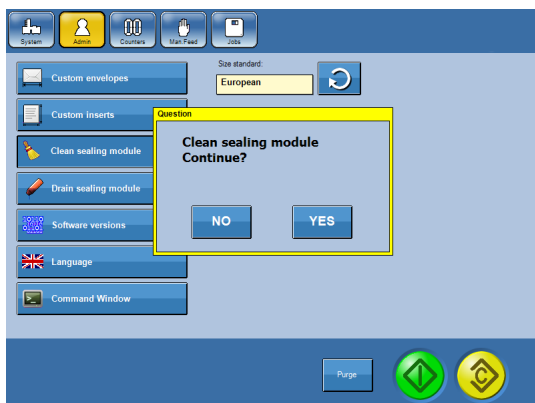
Screw the cap back on and lift the container into place.

Note

The tube can be removed from the cap by pressing on the ring [A].

Fill/Refill Sealing Fluid

The fresh fluid container has to be filled if it is the first time to run the system and when the machine indicates Refill fluid .



- 1 Fill the fresh fluid container with sealing fluid.
- 2 From the Main screen, press the [Admin] button and then press the [Clean sealing module] button.

Note

Make sure the waste fluid container is not full before running the cleaning program. Cleaning will drain up to 20 cl (7 fl oz).

Confirm cleaning the sealing module by pressing the [Yes] button.

- 3 Wait until the cleaning process is finished (message disappears).
- 4 Remove and drain the waste fluid container.

Empty System from Sealing Fluid

If the system has to be emptied from sealing fluid, for example before moving the Inserter, follow instructions below.



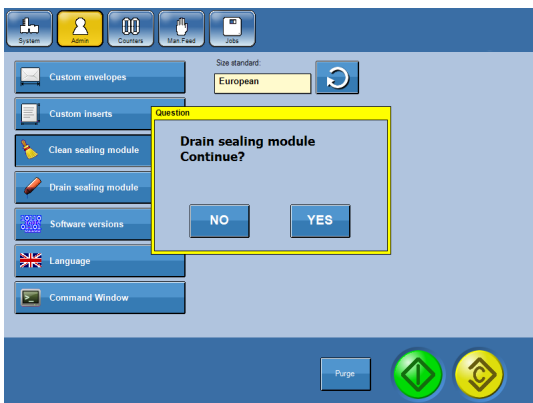
- 1 From the Main screen, press the [Admin] button and then press the [Drain sealing module] button.

Note

Make sure the waste fluid container is not full before running the cleaning program. Emptying will drain up to 20 cl (7 fl oz).

- 2 Confirm draining the sealing module by pressing the [Yes] button.

Wait until the draining process is finished (message disappears).



- 3 Remove and drain the both fluid containers.

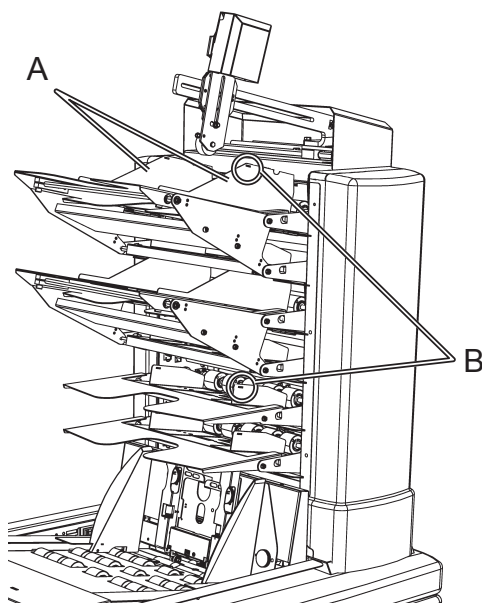
Loading Paper/Booklets/Envelopes

Loading Paper in TF

General

The loading capacity, indicated with a mark (B), is 28 mm (1.1")* for each bin in the TF. Minimum paper size is 89 mm x 160 mm (3.5" x 6.3") and maximum paper size is 300 mm x 420 mm (11.8" x 16.5").

*Loading capacity for optional high capacity bin is 70 mm (2.8").



Before loading the bins, make sure that the sheets are well fanned, aligned and that the ink has dried out. Load the sheets into the bins and adjust the side guides (A) to make sure the loaded paper is placed in the centre of the bin.

 **Note**

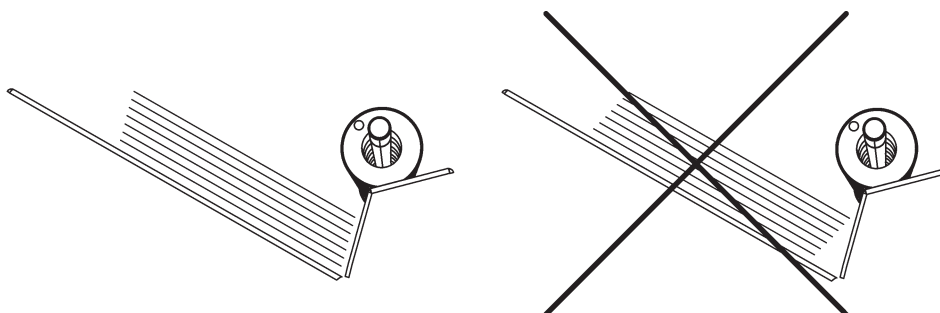
Do not load paper higher than the mark (B) on the side guides.

 **Note**

Make sure all sheets in each bin are turned in the same direction to prevent the double sheet detection sensors to indicate non-existent double feeds.

 **Note**

- If the TF is equipped with a OMR/BCR scanner, lift the reader before loading sheets.
- Make sure that all sheets are placed up against the separation beam, as in the figure down to the left, to avoid misfeeds.



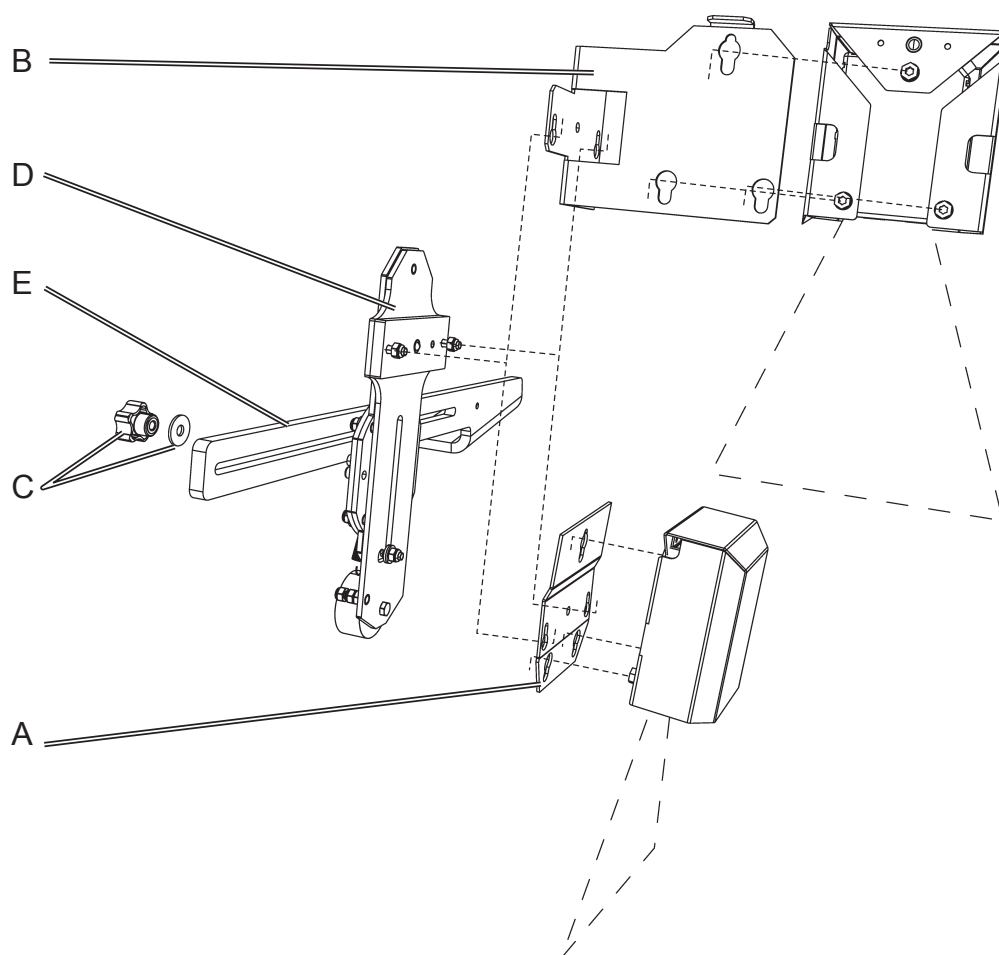
Positioning the scanner

General

The scanner kit is delivered with two positioning brackets. One for reading marks printed in ladder position (A) and one for reading marks printed in picket fence position (B) (see **9 Specifications** for explanation). By removing the scanner bracket lock screw and washer (C), the scanner bracket (D) can be moved to the other side of the scanner arm (E). This means that the scanner can be installed in four different positions.

Note

The scanner can only be installed to the Towerfeeder closest to the Inserter.

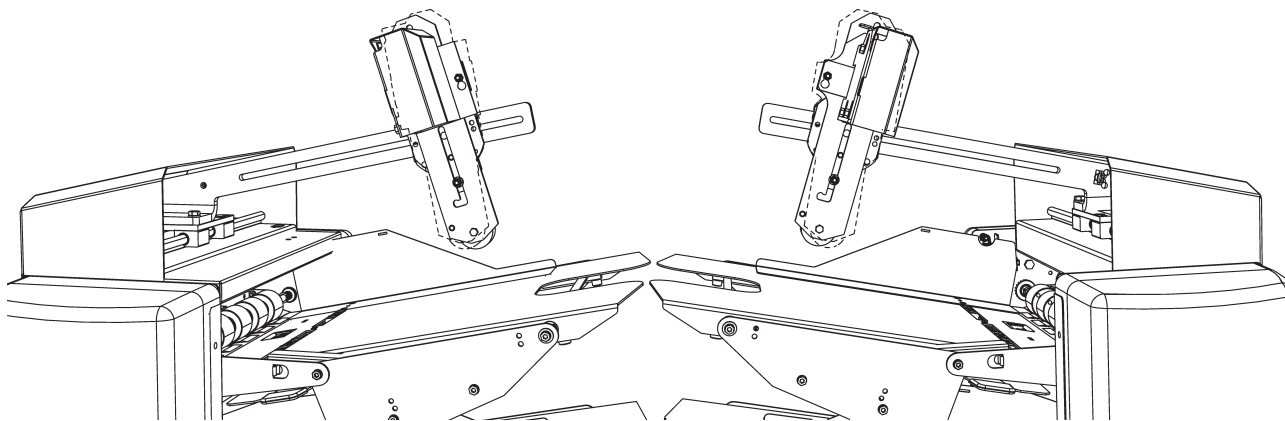


On the scanner bracket there are two threaded studs with nuts which fits into two corresponding keyholes in either positioning bracket. The positioning bracket is kept in place by a spring loaded steel ball. Lift the positioning bracket to remove it from the scanner bracket.

On the back side of the scanner cover there are three screws with nuts. These screws with nuts fits into three corresponding keyholes in either positioning bracket. The scanner is kept in place by a spring loaded steel ball. Lift the scanner cover to remove it from the positioning bracket.

Tilting the scanner bracket

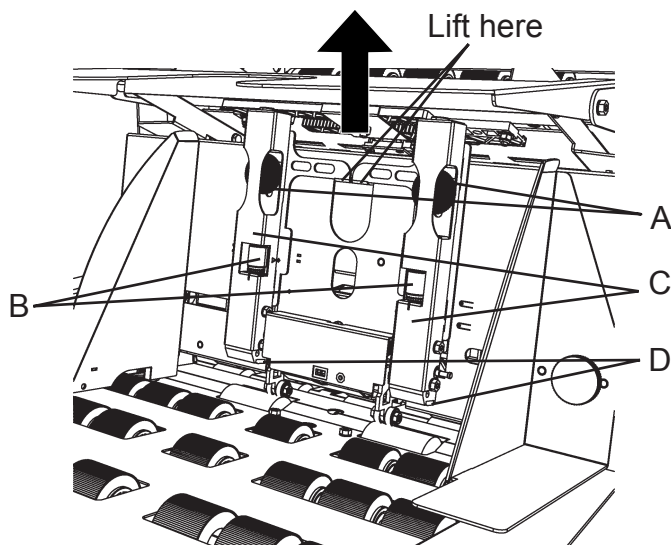
When the scanner is set up for reading marks printed in picket fence position, the marks tends to move away from the scanner beam as the bin empties. Therefore the scanner must be tilted away from the feed roller.



The scanner bracket can be set to three different positions. Illustrations show the scanner bracket tilted away from the feed roller. The dashed lines shows the scanner in standard/middle position.

Loading Booklets in BF

The loading capacity is 150 mm (5.9") for the Bookletfeeder. Minimum booklet size is 89 mm x 160 mm (3.5" x 6.3") and maximum booklet size is 300 mm x 315 mm (11,8" x 12,4"). Maximum thickness of the booklets is 8 mm ($\frac{1}{3}$ ").



Set separation pressure

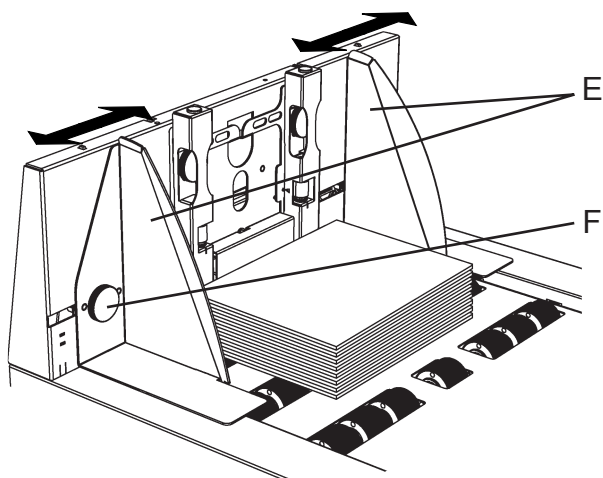
- 1 Release the two screws (A) and set the fine adjustment screws (B) to zero.
- 2 Lift the separators (C). See picture where to lift.
- 3 While lifting the separators insert one booklet underneath and then release the separators.



Note

Place the separation pads (D) on the thickest part of the booklet, normally the spine of the booklet.

- 4 Tighten the screws (A) and remove the booklet.



Load booklets

- 5 Load the booklets with the spine up against the separators. Slide the side guides (E) towards each other against the booklets without squeezing. Adjust the side guides to make sure the loaded booklets are placed in the centre of the Bookletfeeder tray.



Note

Use fixation knobs (F) if necessary.



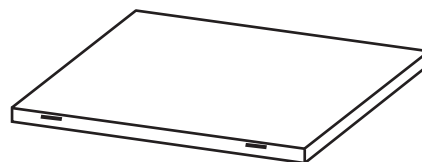
Note

Make sure to load the booklets with the spine in the same direction as when setting the separation pressure.



Note

If feeding booklets where the staples are not centred on the spine make sure to load the booklets with the staples up, as shown in the figure to the right.



Note

If miss or double feeding occur, fine adjust separation pressure with the separation fine adjustment screws (B) according to below.

- Misfeeding: decrease the separation pressure by turning the fine adjustment screws.
- Double feeding: increase the separation pressure by turning the fine adjustment screws.

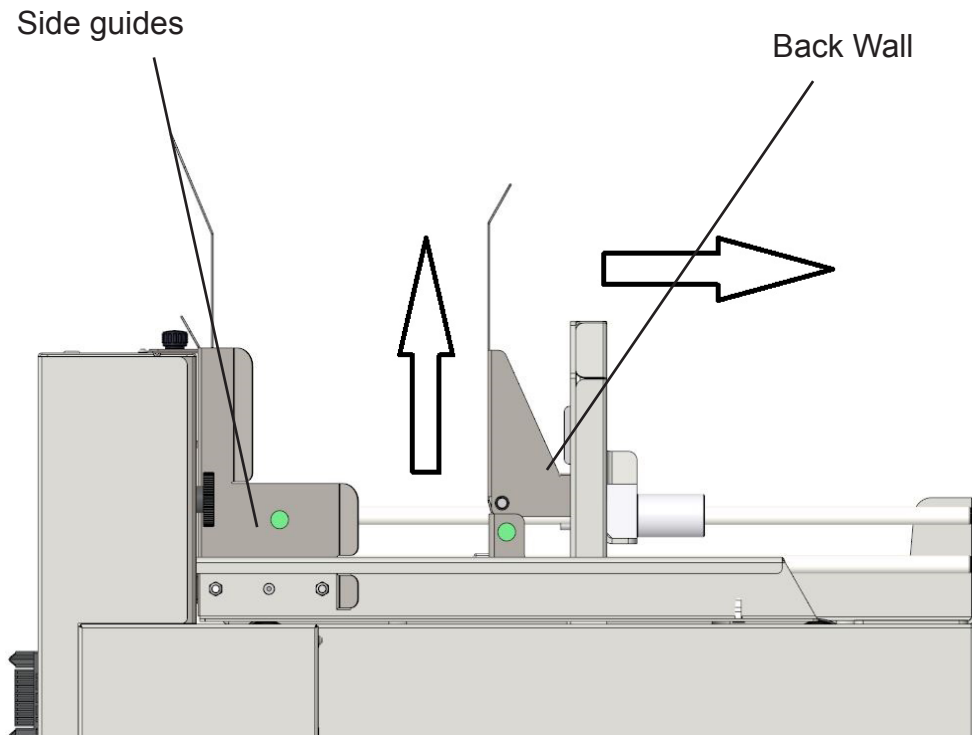
Loading Envelopes in DMI

The loading capacity is 400 - 500 envelopes (based on enveloped thickness). Minimum envelope weight is 75 gsm (20 lb Bond) and maximum weight is 110 gsm (28 lb Bond).

Note

Only use fluid sealing envelopes or strip and grip envelopes. If strip and grip envelopes are used, sealing must be switched off.

4



- 1** Lift up and slide Back Wall all the way to the right.
- 2** Move Side guides to their outermost position.
- 3** Insert envelopes with the flap up and facing left.
- 4** Move Side Guides up against the envelopes then move Back Wall up against the back of the envelope stack if there is room.

Note

Do NOT push Back Wall up hard against the back of the stack of envelopes, machine will automatically adjust pressure after system is set to start. For more indept settings of the envelope feeder, go to Section 9, **Envelope Specifications** and Section 7, **Envelope Feed Skew** and **Detailed Envelope Feeder Set-up**.

Filling Capacity

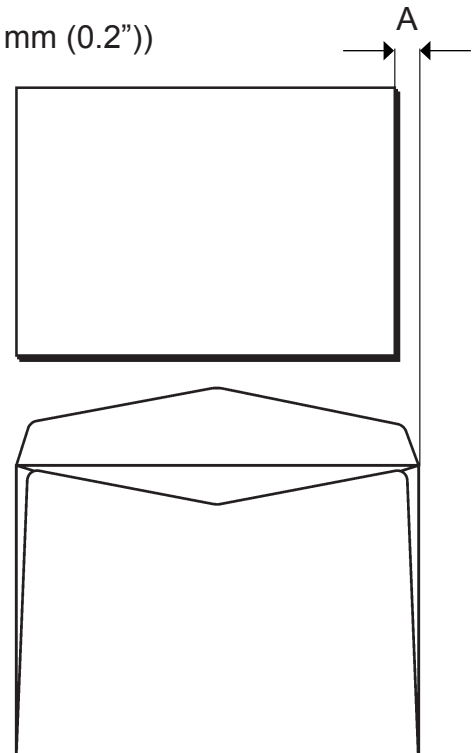
The mail inserting system has a capacity to handle envelopes filled to a thickness up to 12 mm (1/2"). Always make sure to have enough clearance (A) in the envelope for the thickness of the inserts.

Formula to use:

Clearance = 12 mm (0,47") + (thickness of the inserts – 5 mm (0.2"))

5 mm (0.2") insert thickness is default included in the measurement A (12 mm (0.47")).

The thickness is measured as the maximum height, with the documents to be inserted lying on the infeed deck without being compressed.



Log In

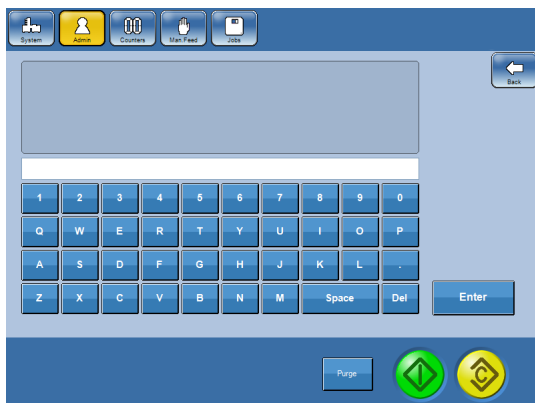
In order to create custom sized envelopes and inserts, to save jobs and scanner profiles you need to be logged in as an administrator.

Note

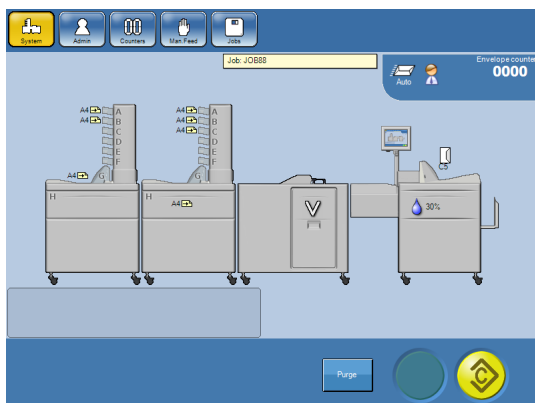
Certain customer configurations will automatically be logged in to Admin at power on. If so, skip this section.



- 1 From the Main screen, press the [Admin] button and then press the [Command window] button.



- 2 Enter the command "ADMIN." followed by the access code using the buttons. Press [OK] to log in. The text "User set to administrator" will be displayed.



- 3 After a successful login an icon, a person with a tie, shows that you are logged in as an administrator.

Note

- The default access code is "1000". Correct command is "ADMIN.1000".
- To change the access code contact your service technician.
- To log out, enter the command "ADMIN." followed by anything but the correct access code.
- You will automatically be logged out when the Inserter is powered off.

2. Running the system

Feeding Options

Operating the Inserter with the Mailfeeder provides several feeding options depending of which modules the Mailfeeder is equipped with. The Inserter can also be used for manual feeding.

Manual Feed

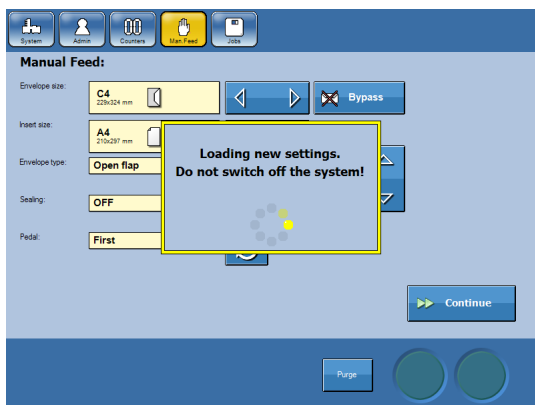
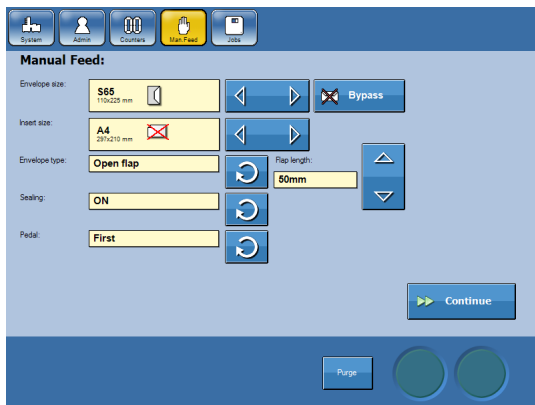
Manual Feed can be used when inserting odd sized material or giveaways the Mailfeeder cannot feed. Manual Feed can be used when the Mailfeeder is installed or without the Mailfeeder with the Inserter as a stand alone unit.

There are three alternatives for how to use the Manual Feed function:

- Automatic start - inserting process automatically starts when a set is placed on the infeed deck.
- Triggered start - inserting process is activated with pedal or [Trigg] button on the display.
- Manual Feed combined with feeding from the Mailfeeder.

For the first two alternatives, all material to be inserted is manually placed on the infeed deck. The last alternative is used when material is manually added to a set fed from the Mailfeeder.

Manual Feed With Automatic or Triggered Start



1 From the Main screen, press the select [Man. Feed] button.

2 Change settings using the arrow buttons.
Envelope size - Choose between preset envelope sizes, custom envelope sizes and bypass.

Insert size - Choose between preset paper sizes and custom paper sizes. If an insert will not fit, it will be indicated with a red cross.

Envelope Type - Select envelopes with opened or closed flap.

Flap length - If Envelope type “Open Flap” is selected, measure the flap and enter the flap length.

Sealing - Select sealing “ON” or “OFF”.

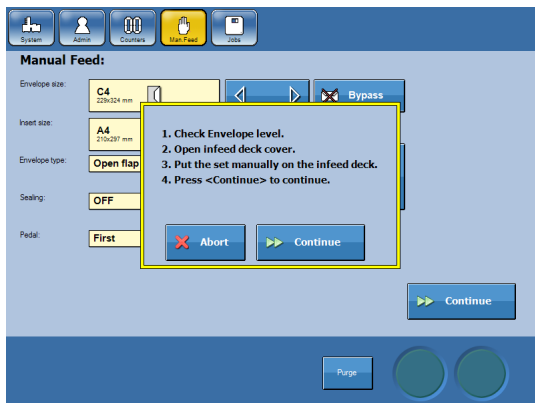
Pedal - Set Pedal to “Off” for Manual Feed with automatic start and to “First” or “Last” for Manual Feed with triggered start.

See section **4 Settings** for more information about settings.

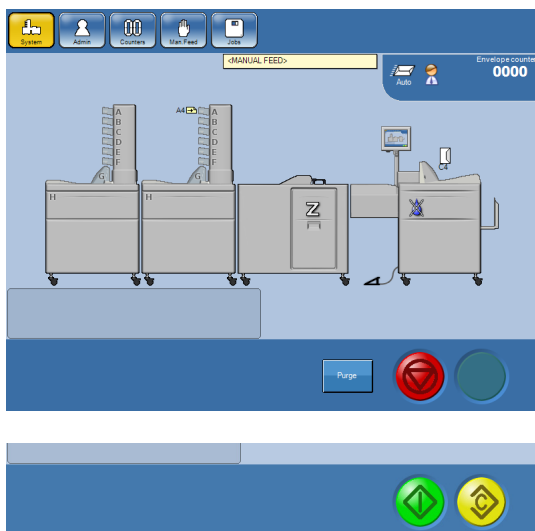
When all settings are changed as desired, press the [Continue] button.

Continued on next page.

Manual Feed With Automatic or Triggred Start, continued



3 Follow the steps shown on screen.



4 The inserting process will automatically start if Pedal “OFF” is chosen. If Pedal “First” or “Last” is chosen, press the pedal or point at the pedal on the display to start inserting.

To exit trigg mode, press the [Stop] button.

5 To continue the manual feeding process and re-enter trigg mode, press the [Start] button.

Manual Feed Combined With Mailfeeder (and Folder)

Manual Feed is also used in order to manually add material to sets fed from the Mailfeeder. This can be done when running Jobs (see section **3 Jobs**).

1 Set Pedal to “First” or “Last” depending on whether you want to put the manually added material first or last on the infeed deck. When programming a Job, point at the Inserter and press the [Pedal: xx] button. See Selecting Pedal On or Off under section **4 Settings**.

2 When the set can be fed onto the Infeed deck, a red arrow is shown above the pedal on the display. Open the Infeed deck cover and manually place the material on the Infeed deck.

3 Continue the inserting process by pressing the Pedal or point at the pedal on the display.

Mailfeeder

The Mailfeeder can feed from up to eight individual sources and consists of at least one of following modules: TF Towerfeeder, BF Bookletfeeder and/or AC Accumulator. Accumulator to receive sheets from optional additional Mailfeeder or external Sheetfeeder.

Towerfeeder

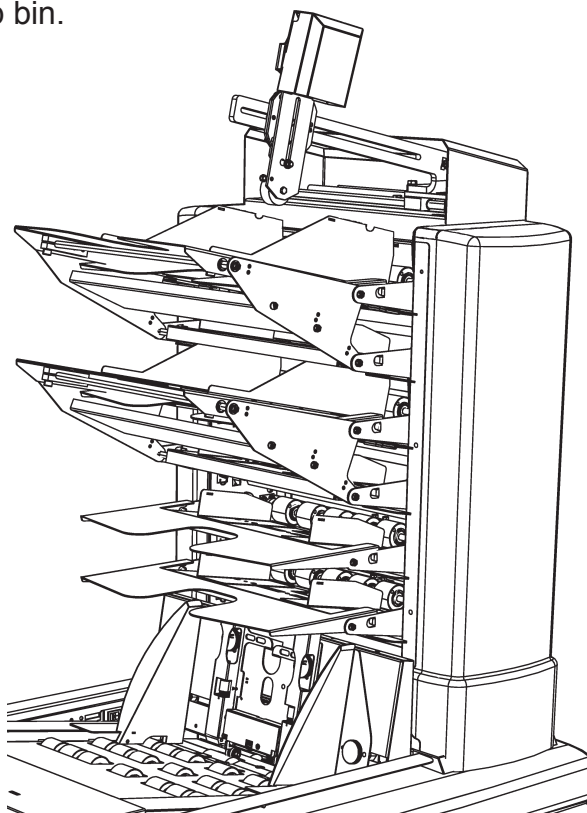
The TF Towerfeeder is a six-bin feeder with the possibility to be set up as a collator or as a feeder. Each bin can feed different sizes of materials into the same envelope. The bins are individually programmable, giving the operator the possibility to choose in which order the bins shall be fed from and each bin can be used several times in each job setup.

Collating - set up as a collator one sheet at a time is fed from each bin.

Feeding - set up as a feeder multiple sheets at a time can be fed from each bin.

Linked bin feeding - by loading the same sheet in two or more bins (cascade) the operator have the possibility to reload the feeder during run.

An OMR/BCR (Optical Mark Recognition/Barcode recognition) scanner (optional) can be installed to the Towerfeeder. The purpose of OMR/BCR reading is to individually control the contents of each set of sheets. The OMR/BCR scanner reads the OMR/BCR marks from the sheets loaded in the top bin.



 **Note**

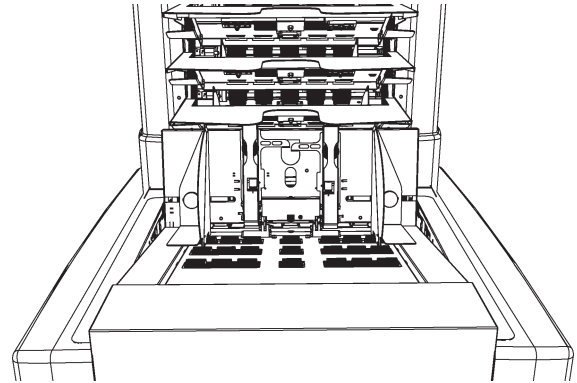
For more information about feeder settings see section **4 Settings**.

Bookletfeeder

The BF Bookletfeeder is capable of feeding single sheets up to booklets with a thickness of 8 mm ($\frac{1}{3}$ "). The documents from the Bookletfeeder can be fed before, after or between the documents from TF and AC in any combination.

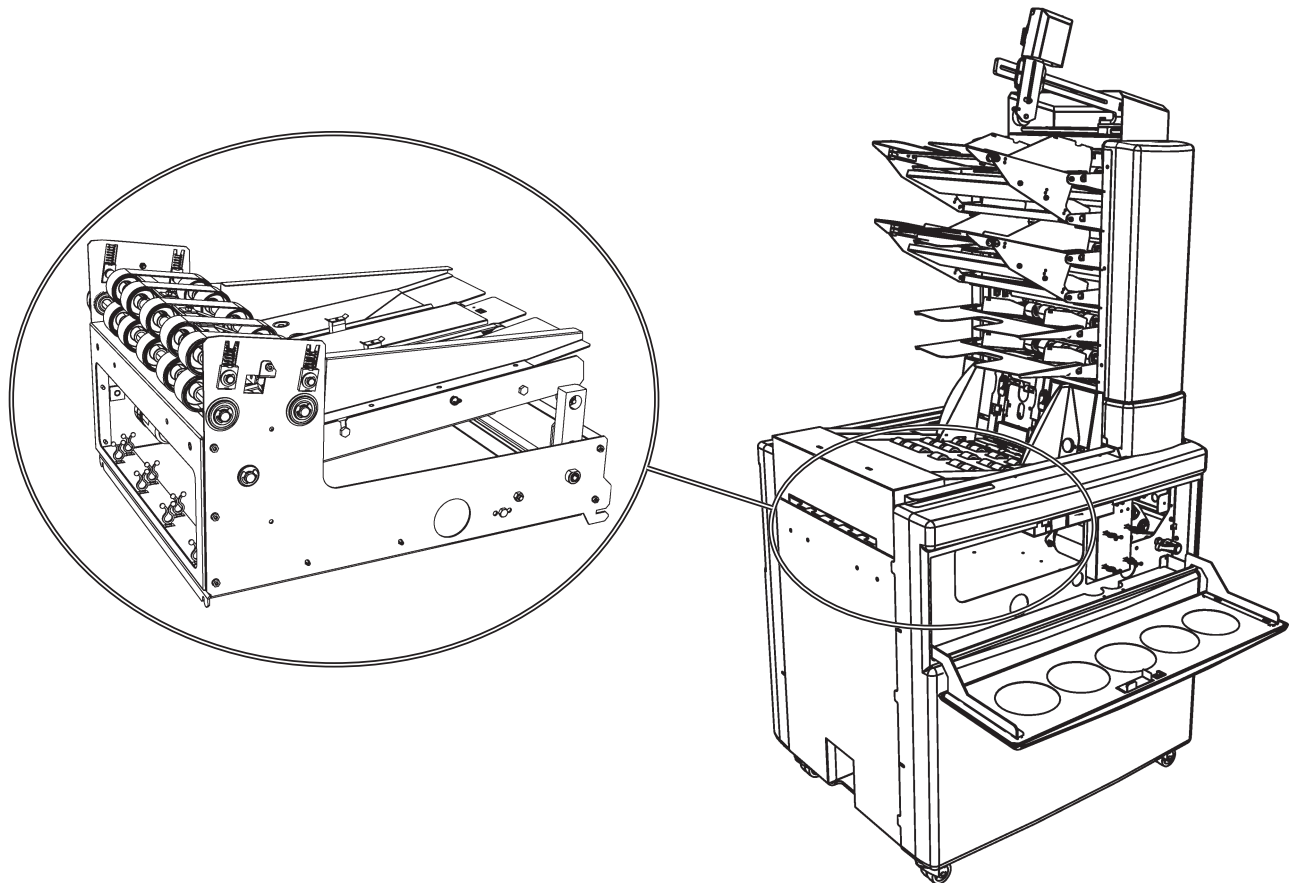
 **Note**

The order in which the bins/Bookletfeeder are fed, affects the productivity. See Mailfeeder Settings under section **4 Settings**.



Accumulator

The AC Accumulator on the Mailfeeder receives material from an external feed source (for example a secondary Mailfeeder) and merges it with the material from the tower and Bookletfeeder. The external feed source can be another Mailfeeder or a Sheetfeeder.



Counters

The System has a resettable Envelope counter, a Preset counter and a Total counter.

From the Main screen, press the [Counters] button.

Counter/Total Counter



The Insert counter value is the number of insertions since the last reset of the Insert counter value. To reset Insert counter, press the [Clr] button.

The Envelope counter value is the number of insertions since the last reset of the Envelope counter value. To reset Envelope counter, press the [Clr] button.

The Total counter value is the total number of insertions made on this machine. The total counter is non resettable.

Note

These adjustments can also be done during run.

Preset Counter



When using Preset counter, the inserting process will automatically stop when the chosen number of insertions is reached.

Press the loop arrow to set the preset counter to the desired number of insertions.

To deactivate and reset the preset counter, press the [Clr] button.

Tips and Tricks

General

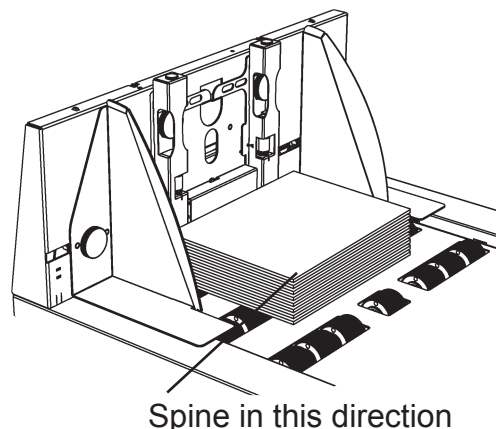
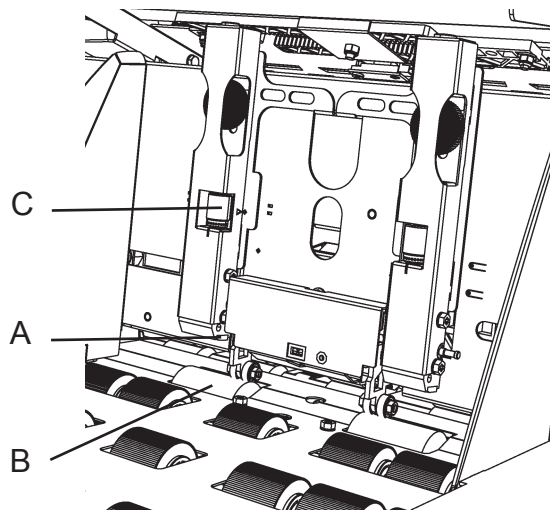
If the mail inserting system does not function as desired, try the tips and tricks described below and later on in this section.

- Check that all of the machines power are switched on. If the touchscreen displays communication failure, then you should check power is on to all other modules in the system. You will need to power down the Inserter first, then switch on the other module (most upstream module first).
- Check and clean the machine as described in Maintaining Your Machine under section **8 General Remarks**.
- Decrease the speed. Some envelopes and inserts may require reduced speed for operation to run trouble-free. If problems occur for a certain envelope and/or insert type adjust the speed as described in Adjusting the Speed under section **4 Settings**.
- Measure the envelope size and make sure it corresponds to the size set according to section **4 Settings**.
- Make sure the correct envelope type, open or closed, is set according to Setting Envelope Type under section **4 Settings**.
- Measure the insert sizes and make sure it correspond to the sizes set according to section **4 Settings**. Make sure the right paper orientation, landscape/portrait, is chosen.
- Make sure there is enough clearance in the envelope for the thickness of the inserts as described in Filling Capacity under section **1 Basics**.
- Check that the envelopes are loaded as described in section **1 Basics**. The envelope should be loaded flap side in upper position and oriented so that the flap is positioned facing to the left.
- Check that the papers and booklets are loaded as described in section **1 Basics**. Make sure sheets are well fanned, aligned and that the ink has dried out.
- When feeding from the Towerfeeder, make sure all sheets are turned in the same direction in each bin. If sheets are turned in difference directions and there are differences in the print over the page, the double detection sensors may indicate non-existent double feeds.

Feeding Booklets from BF

If problems such as feeding miss or damaged booklets occur when feeding booklets from the Bookletfeeder, it is often caused by a separation set too tight.

- Set the separation pressure according to Loading Booklets in BF under section 1 **Basics**. Decrease separation pressure but make sure the gap between separation pads (A) and separation rollers (B) are not larger than twice the thickness of the booklet.
- Set the separation pressure according to Loading Booklets in BF under section 1 **Basics**. Decrease separation pressure using the fine adjustment screws (C) until double feeds occur. Thereafter increase the separation pressure slightly to prevent double feeds.
- Load the booklets with the spine towards the front of the machine instead of loading the booklets with the spine up against the separators.



Feeding Small Booklets

If the booklets are small compared to the envelope and the rest of the inserted material problems such as sealing miss can occur.

- Decrease the speed as described in Adjusting the Speed under section 4 **Settings**.
- Avoid feeding the booklet first onto the infeed deck. Change the order in which the inserts are fed onto the infeed deck as described in Mailfeeder Settings under section 4 **Settings**.

Feeding Folded Material

Feeding folded material from the Towerfeeder can result in double feeding. It is recommended to use the Bookletfeeder when feeding folded material.

 **Note**

Do not use the extra weight.

Feeding Reply envelopes

To prevent problems when feeding reply envelopes from the Towerfeeder, load the reply envelopes window side up and flap leading when using window envelopes. Do not use self-sealing envelopes, these envelopes can cause paper jam and can leave glue residue in the machine.

Make sure to load the reply envelopes flap side down to prevent insertion miss (fault code DMI:03-11 Insertion miss).

Inserting Single Sheets

If problems occur when inserting single sheets, make sure the envelopes are new and not buckled.

Using Window Envelopes

Some envelopes such as window envelopes can cause problems based on window location, please refer to the Detailed Envelope Feeder Set-Up in **7 Troubleshooting**.

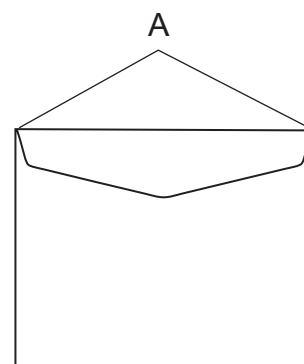
Sealing Problems

If the envelopes are not sealed properly or if the sealed envelopes open up it can be prevented as described below.

- If the envelopes are not sealed, make sure sealing is not turned off. See Select Sealing On or Off under section **4 Settings**.
- Adjust the speed. If the speed is set higher than recommended for the present insert/envelope it can result in sealing problems. See Adjusting the Speed under section **4 Settings**.
- Clean the Sealing Module paper path as described in Maintaining Your Machine under section **8 General Remarks**. Glue residue can cause sealing problems.
- Adjust the amount of sealing fluid as described in section **4 Settings**. Some envelopes such as kraft paper envelopes may require an increased amount of sealing fluid to be sealed properly.
- If the envelopes open up although the amount of sealing fluid is sufficient, the time the flap is under pressure during the sealing process can be increased. Increase sealing delay as described in Advanced Settings under section **4 Settings**.
- If the inserts are not inserted far enough into the envelope, the envelope will not be sealed properly. Increase the insert offset as described in Advanced Settings under section **4 Settings**.
- If the envelopes are old, the adhesive may be dried out. Change to new envelopes.

Envelope is Damaged at Corners

If the envelopes are damaged at the upper corners (A), the envelope stop position can be increased as described in Advanced Settings under section **4 Settings**. When stop position has been increased, the insert offset has to be increased correspondingly for inserts to be inserted far enough into the envelope. See Advanced Settings under section **4 Settings**.



Inserting Process is Slow

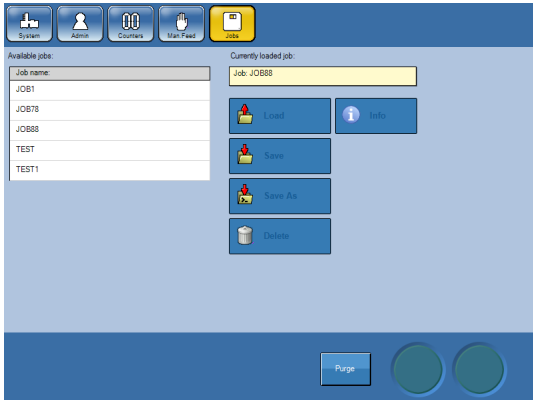
Make sure the Mailfeeder is set up as described in section **4 Settings**. The order in which the bins/Bookletfeeder are fed, affects the productivity.

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3. Jobs

Job Handling

To get access to all features regarding job handling you have to be logged in as an administrator, see section **1 Basics**.



1 To get to the Jobs screen, press the [Jobs] button on the Main screen.

2 From the Jobs menu you can load previous stored jobs, delete jobs, save changes to jobs, save current job as a new job and rename jobs.

Each item is explained on following pages.

Note

If you are not logged in, you can open previously stored jobs, run the job and make some changes but not store them.

Setting Up a New Job

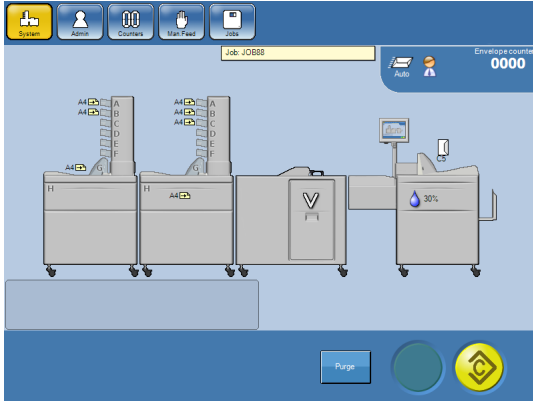
Note

To be able to set up a new job you have to be logged in as administrator, see section 1 Basics.

Note

To be able to set up a new job, all machines in the system have to be powered on.

3. Jobs



1 From the Main screen, point at the machine you want to change settings for.

2 Change settings according to section 4 Settings.

3 Press the [Calibrate/Trial run] button. Check the trial piece to verify your settings.

4 Press the [Start] button to start the inserting process.

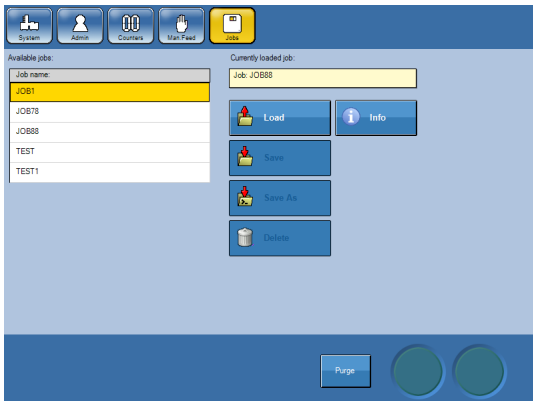
Note

Job can be saved at any time by following instructions in **Storing a Job** later on in this section.

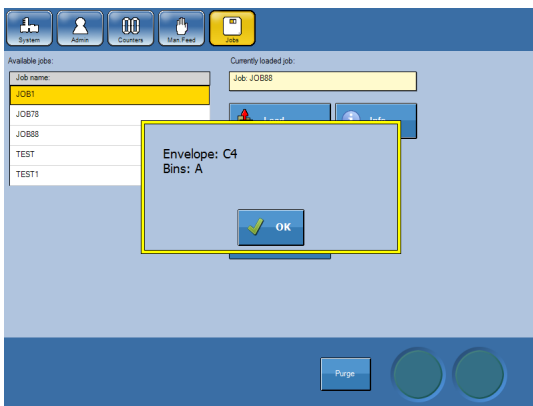
Note

Another method to create a new job, alternative to the one described above, is to open a previously stored job, make changes to it, choose Save as... and store the job with a new job name. See **Storing a Job** later on in this section.

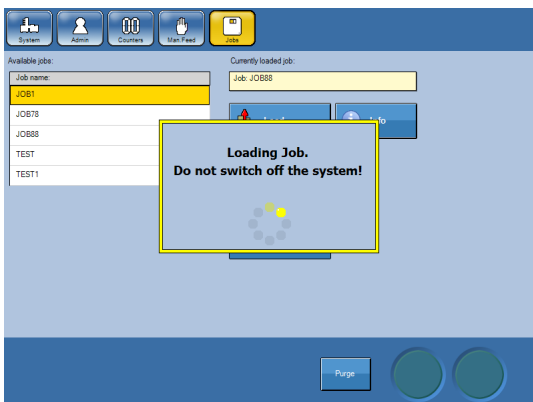
Recalling a Job



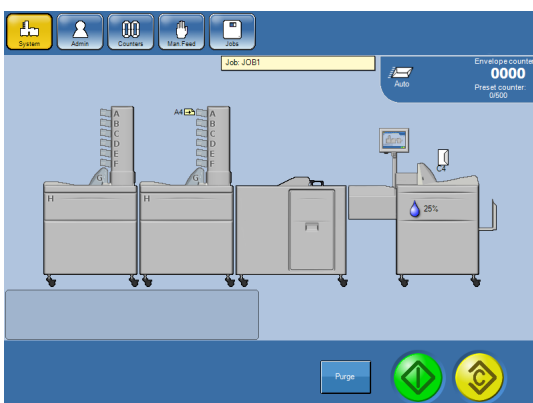
- 1 Press the [Jobs] button on the Main screen and point at a job.



- 2 You can either press the [Info] button to see information about the job or...



- 3 ... you can directly press [Load] to recall the job.



- 4 The Job is now uploaded and becomes the current job.

Press the [System] button to go back to the Main screen. From there you can press the [Start] button to start the job.

Note:

If the job requires OMR/BCR reading do not forget to turn the reader on. See section 4 for how to turn the reader on.

Storing, Deleting and Renaming Jobs

The Inserter has an unlimited storage capacity of different jobs.

Storing a Job

3. Jobs

Note

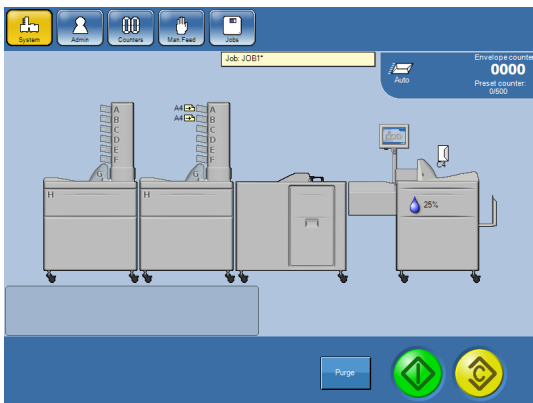
To be able to store settings you have to be logged in as an administrator, see section 1 **Basics**.

Note

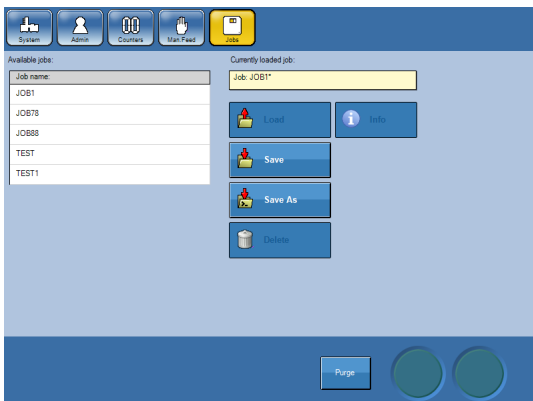
To be able to store settings the machines in the system have to be powered on.

Changes of settings according to section 4 **Settings** for a particular job are **temporary**. You can run the system with these changes but as soon as you change a setting again the previous settings will be lost. To store these settings permanently, you need to save the job.

You can choose to run the system with temporary changes and store your settings afterwards.



Jobs that has been changed but not saved yet are marked with [*].



To save the job press the [Jobs] button and then the [Save] button.

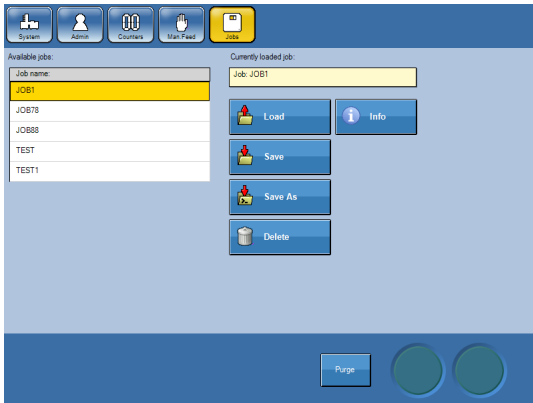
Now you have two choices:

- Choosing Save will overwrite the current Job. The Current Job name is displayed on top of the screen.
- Choosing Save as... gives you the option to save it as a new job or overwrite another job.

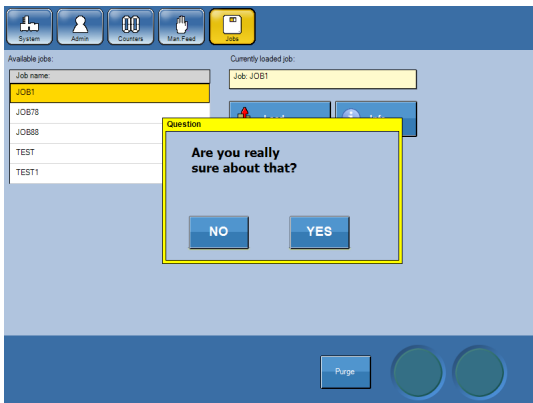
Deleting a Job

Note

To be able to store settings you have to be logged in as an administrator, see section 1 Basics.



- 1 From the Jobs screen, select the job you want to delete.

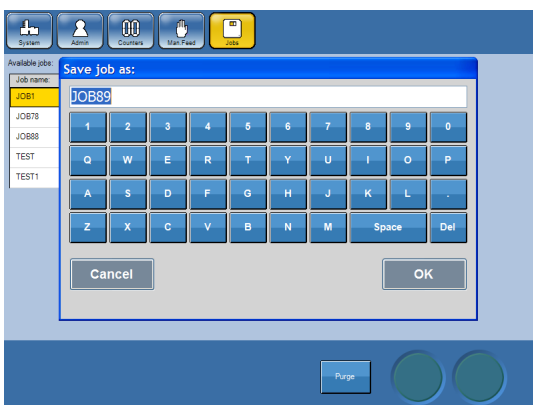


- 2 Press the [Delete] button and confirm deletion by pressing the [Yes] button.

Renaming a Job

Note

To be able to store settings you have to be logged in as an administrator, see section 1 Basics.

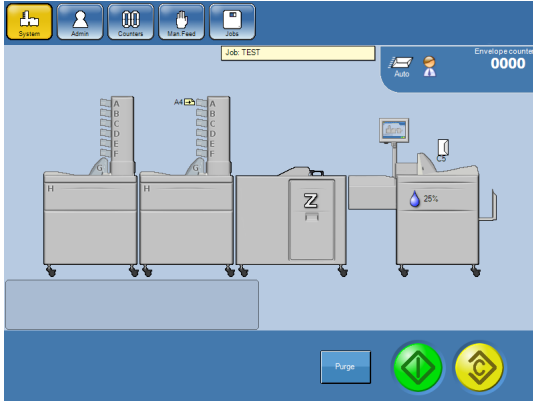


If you want to rename a job, store the job using the [Save as] button and then delete the old job.

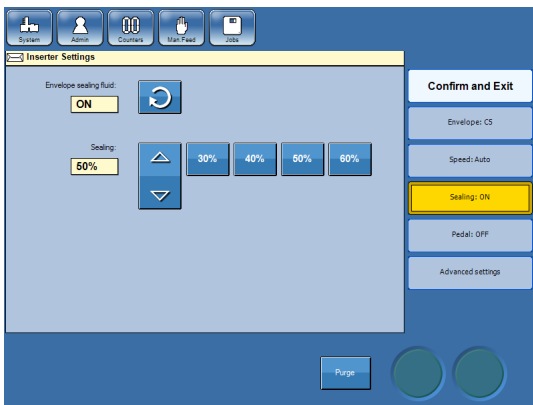
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4. Settings

General Procedure

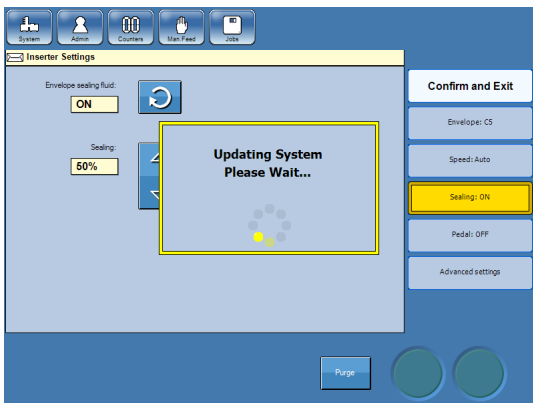


From the Main screen, point at the module you want to change setting for.



Select which setting you want to change.

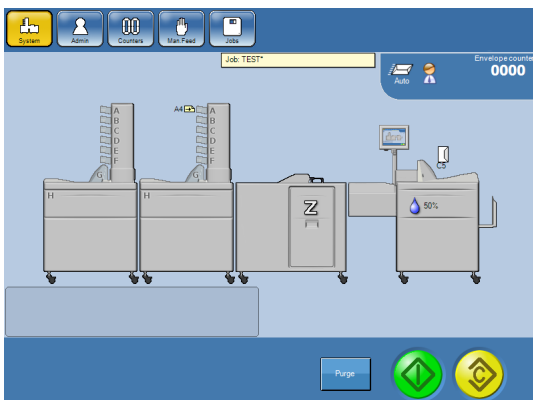
Press buttons to enter your new setting and press the [Confirm & Exit] button.



System will be updated with your new settings.

Continue with the next machine you want to change settings for.

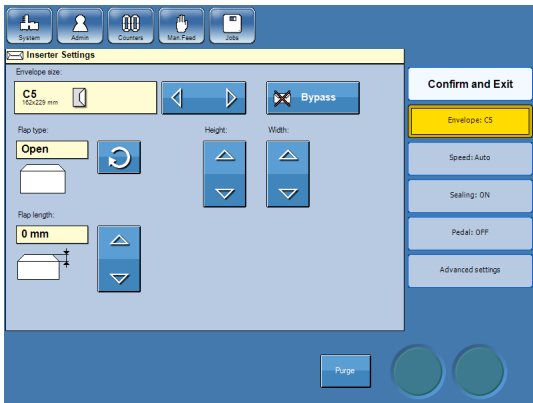
When you are done changing press the [System] button to go back to the Main screen.



Press the yellow [Calibration] button to verify your settings.

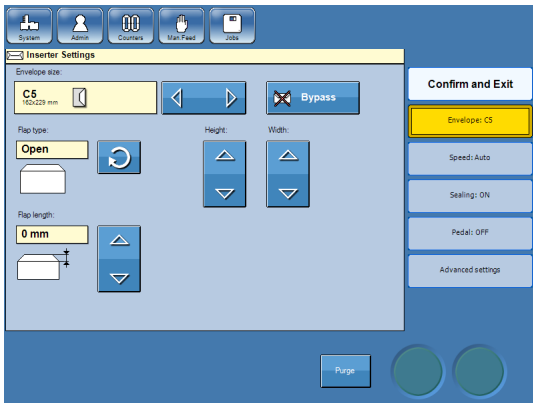
Press the green [Start] button.

Inserter Settings



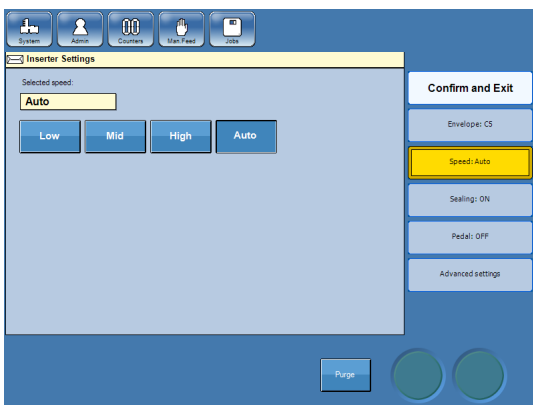
- 1 From the Main screen, point at the Inserter.
- 2 In the list to the right on the Inserter screen, select which setting you want to change and press the corresponding button.

Setting Envelope Size and Flap type



- 1 Press the [Envelope:xx] button.
 - 2 Select envelope using the arrow buttons.
- Note**
To bypass the inserter, press the [Bypass] button. The “inserts” will be passed through the Inserter without being inserted into any envelope.
- 3 Use the loop arrow to select between open or closed flap. If open flap is selected, measure the flap and enter the measured value.
 - 4 Continue with other Inserter changes or press the [Confirm & Exit] button if you are done changing settings for the inserter.

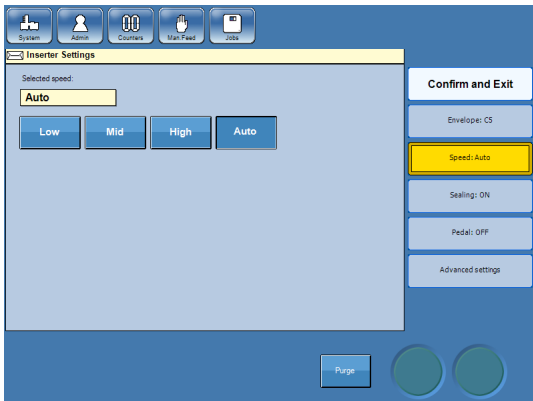
Adjusting the Speed



- 1 Press the [Speed:xx] button.
- Speed can be set to Low, Mid, High or Auto. For best performance and highest reliability choose automatic speed where the system automatically adjusts the speed depending on the job setup, size of the format and the thickness of the inserts.
- High Speed: Inserts < 2 mm (1/8")
 Medium Speed: Inserts 2 – 6 mm (1/8" - 1/4")
 Low Speed: Inserts > 6 mm (1/4")

Continued on next page.

Adjusting the Speed, continues

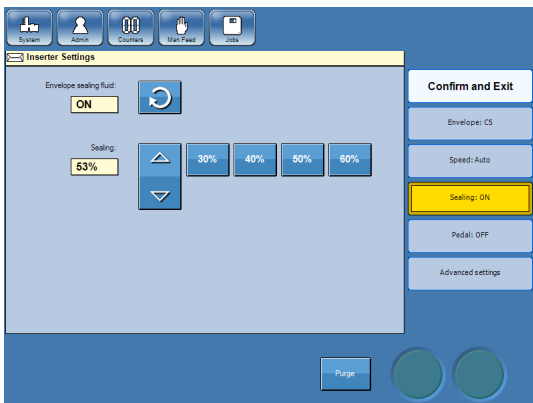


- 2 Select speed by pressing the corresponding button.
- 3 Continue with other Inserter changes or press the [Confirm & Exit] button if you are done changing settings for the inserter.

Note

Some envelopes may require reduced speed for operation to run more trouble-free, see Tips and Tricks under section 2 Running the System.

Adjusting the Amount of Sealing fluid

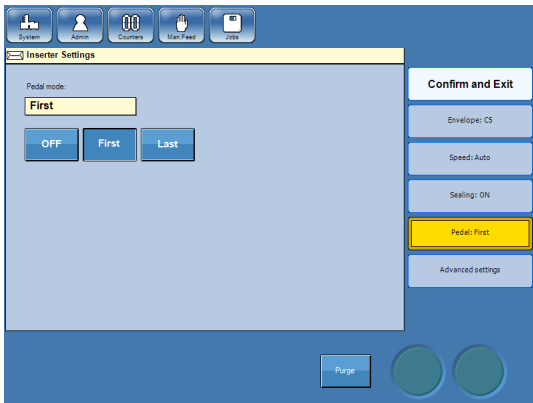


- 1 Press the [Sealing:xx] button.
Sealing can be set to “OFF” or “ON”. When set to “ON”, select between 4 preset values or fine adjusted.
Increase the amount of sealing fluid if the envelopes not is properly sealed. Decrease amount of sealing if envelopes are to wet.
- 2 Use the buttons to select between preset values and/or fine adjust with the arrow buttons.
- 3 Continue with other Inserter changes or press the [Confirm & Exit] button if you are done changing settings for the inserter.

Note

This adjustment can also be done during run from the main screen.

Selecting Pedal On or Off



1 Press the [Pedal:xx] button.

Pedal can be set to “OFF”, “FIRST” or “LAST”.

“OFF” - Pedal is not active.

“FIRST” - manual feeding is done before the Mailfeeder.

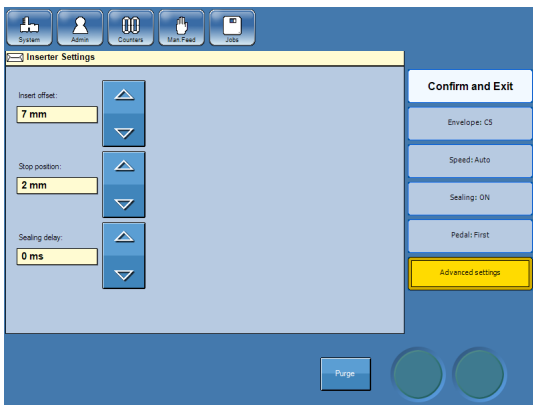
“LAST” - manual is done after the Mailfeeder.

2 Press the desired button.

3 Continue with other Inserter changes or press the [Confirm & Exit] button if you are done changing settings for the inserter.

4. Settings

Advanced Settings



1 Press the [Advanced settings] button.

2 Adjust the Insert Offset, Stop Position and/or the Sealing Delay as described below.

3 Continue with other Inserter changes or press the [Confirm & Exit] button if you are done changing settings for the inserter.

Insert Offset

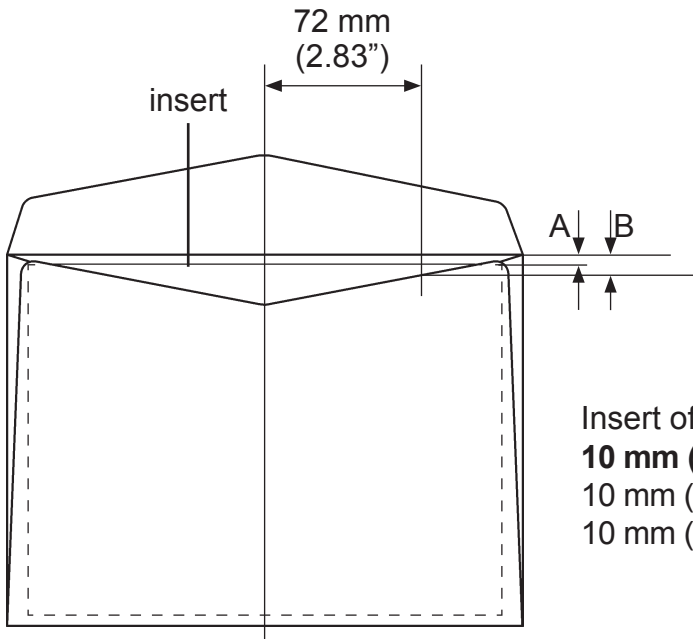
Insert offset is the distance is measured from the flap crease to the outermost edge (trail edge) of the inserts i.e. how far the inserts are inserted into the envelopes.

The insert offset can be adjusted if you want the inserts to be inserted further into the envelope. By default, the insert offset is 10 mm (0.39”). Press the arrow buttons to adjust this value.

The actual insert offset [A], depends on both the insert offset setting and stop position setting, described below. To obtain the desired actual insert offset, check the stop position setting and adjust the insert offset according to the examples in the table below.

Continued on next page.

Insert Offset, continued



| Insert offset | Stop position | Actual insert offset |
|----------------------|---------------------|----------------------|
| 10 mm (0.39") | 8 mm (0.31") | 2 mm (0.08") |
| 10 mm (0.39") | 10 mm (0.39") | 0 mm (0.0") |
| 10 mm (0.39") | 12 mm (0.47") | -2 mm (-0.08") |

 **Note**

The actual insert offset [A] must not exceed [B], where [B] is the measure between the envelope flap crease and bottom flap edge measured 72 mm (2.83") from the centre of the envelope.

Stop Position

Stop position is where the envelope is positioned before it will be opened and insertion takes place. If envelope opening miss or insertion miss should occur (fault codes IN-0406 and IN-0311), the envelope stop position can be adjusted to facilitate opening and inserting. The default value is 8 mm (0.31"). By increasing the value, the envelope is stopped at a later point. Press the arrow buttons to adjust this value.

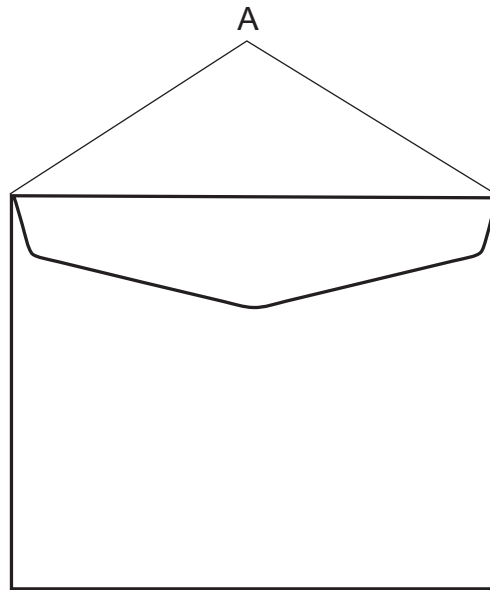
 **Note**

If the stop position has been adjusted, insert offset must be adjusted correspondingly for the inserts to be inserted as far as desired. When the Stop position is increased, the actual insert offset will be decreased. See Insert Offset above for more information and examples.

Flap Tearing

If you are experiencing tearing of the flap at the hinge line [A], the Stop Position and Insert Offset can be adjusted to resolve this issue:

- Set the Stop Position between 12mm (0.47") to 14mm (0.55");
- Vary the Insert Offset between 10mm (0.39") to 14mm (0.55").



Sealing Delay

Some envelopes need more pressure time to be sealed properly. If envelopes are not sealed properly, the sealing delay can be increased to extended the pressure time. Press the arrow buttons to adjust this value.

 **Note**

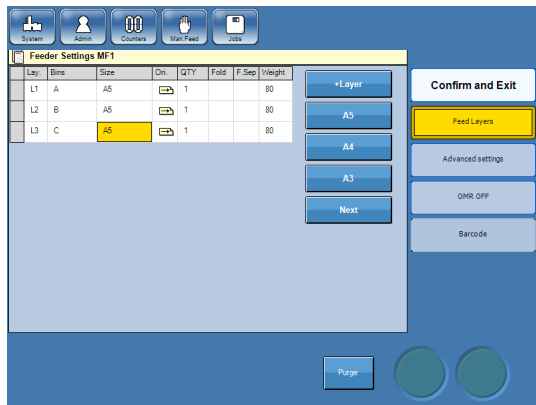
Prior to adjusting the sealing delay, increase the amount of sealing fluid as described above.

MF Mailfeeder Settings

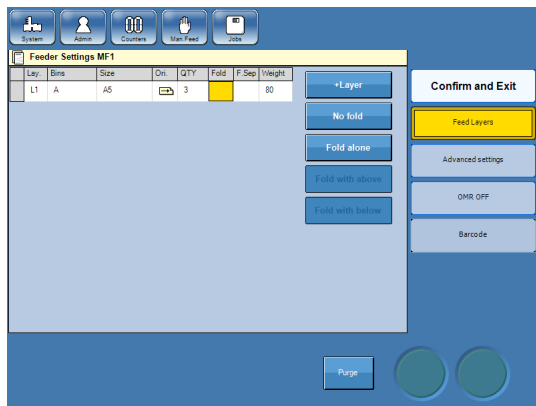
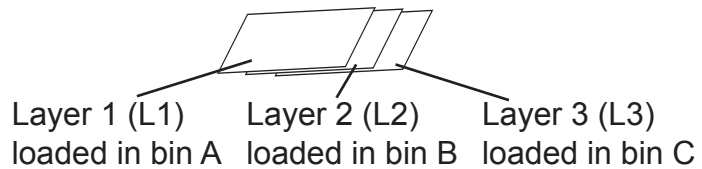
A Mailfeeder can feed from up to eight individual sources; one Bookletfeeder, one Accumulator and the six bin Towerfeeder. There are several possibilities for how to use the Mailfeeder in order to set up jobs corresponding to the user's requirements. A secondary Mailfeeder feeds to bin H on the primary Mailfeeder.

Layers

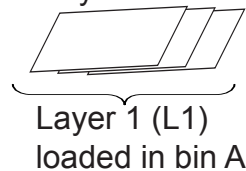
The insert consists of one up to ten layers as shown in the Mailfeeder set up. A layer can consist of up to 60 sheets/booklets and the total amount of sheets/booklets in one insert can be up to 60. The order of the layers corresponds to the order of documents inserted into the envelope. By inserting a layer, a new layer is created. By editing an existing layer, settings such as paper size can be changed. How to create and edit layers is explained later on in this section.



If the set consists of three sheets and the three sheets are loaded in three separate bins, each sheet corresponds to one layer.

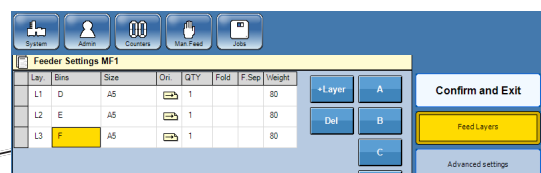
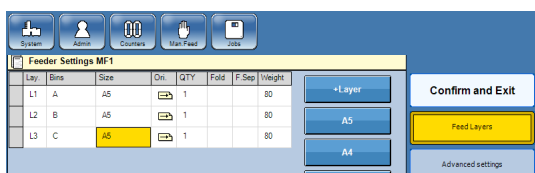


If the three sheets are pre-collated and loaded in the same bin, the three sheets together correspond to one layer.



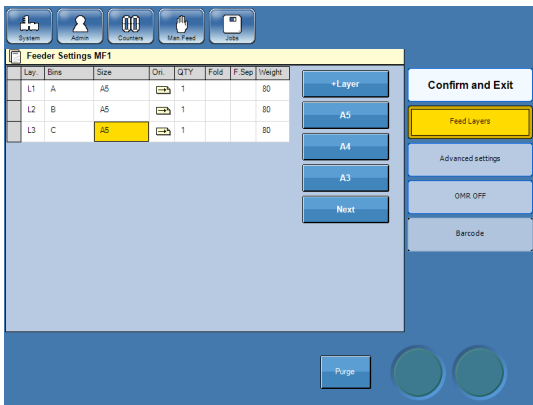
When using the Mailfeeder as a collator, the order of the documents inserted into an envelope will be the same as the order of the layers. See examples on following pages for more information on document order depending on Mailfeeder set up.

For best productivity, the layers shall be ordered with bins in ascending alphabetical order.



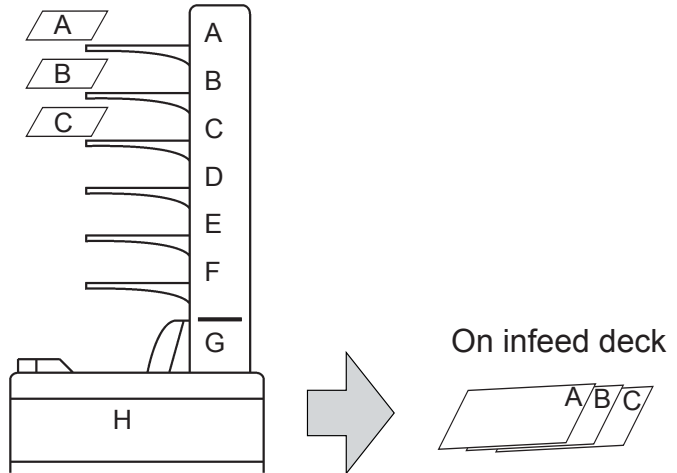
Ascending alphabetical order

Examples of Mailfeeder Set Up



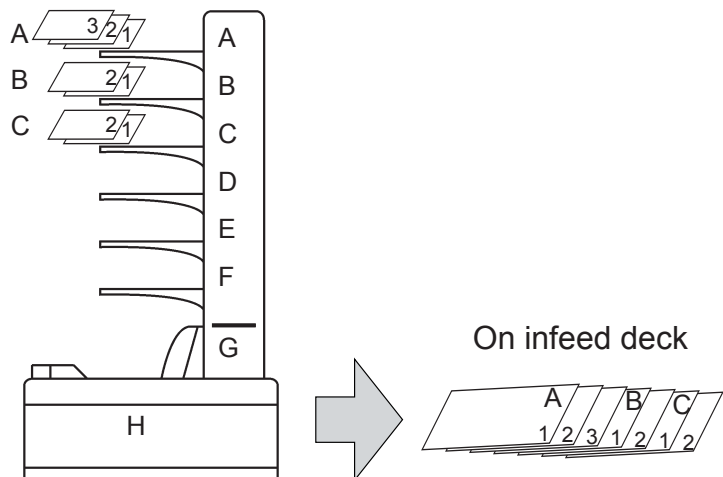
Example 1 - Collating

In this example the Towerfeeder is set up as a collator, feeding one sheet from each bin. The order of layers corresponds to the order of the documents in the insert set.



Example 2 - Feeding

The Towerfeeder can also be used as a feeder, as in this example where multiple sheets are fed from each bin. This can be used for pre-collated insert sets.



Note

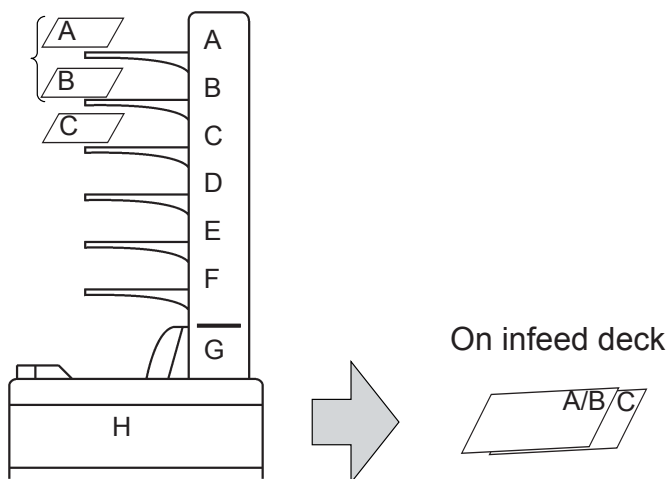
The Towerfeeder is top fed, i.e. the top sheet is fed first. Therefore the pre-collated set has to be collated in reversed order for the documents to be in correct order in the envelope. The Bookletfeeder, on the other hand, is bottom fed, i.e. the bottom booklet/sheet is fed first. When feeding pre-collated sets from the Bookletfeeder the set has to be collated in the same order as the documents shall be in the envelope.

Examples of Mailfeeder Set Up, continued



Example 3 - Linked bins (Cascade)

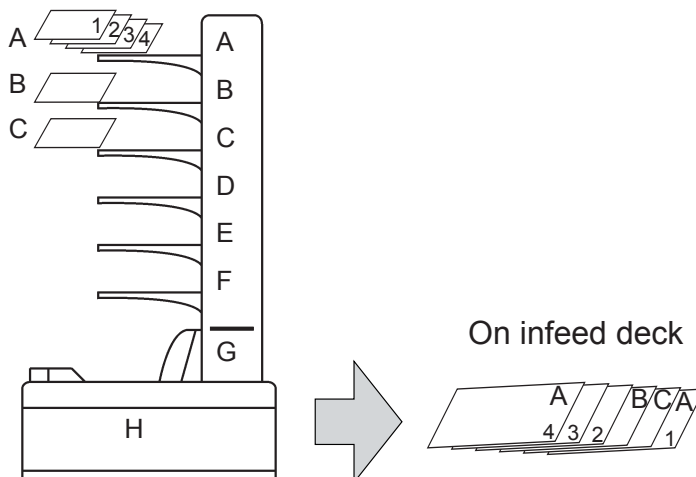
Two or more bins can be linked as in this example where bin A and B both are selected in layer 1. One sheet will be fed from bin A until the bin is empty, thereafter the Towerfeeder will automatically switch to feed from bin B. This setup makes it possible to refill papers during run.



Example 4

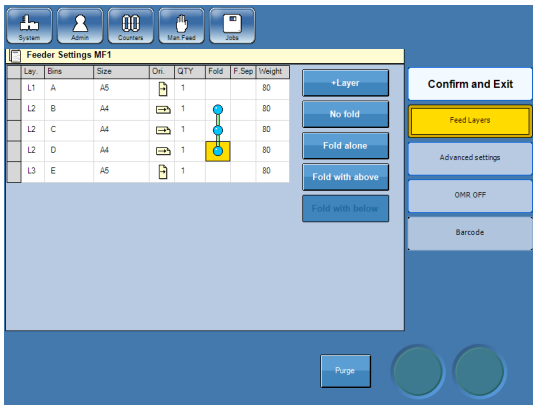
Each bin can be used several times in each job setup. In this example one sheet from bin A is fed, thereafter one from bin C, one from bin B and finally three sheets from bin A is fed.

This can be used if you have a pre-collated set and want one or more extra sheets in the middle of the pre-collated insert set.



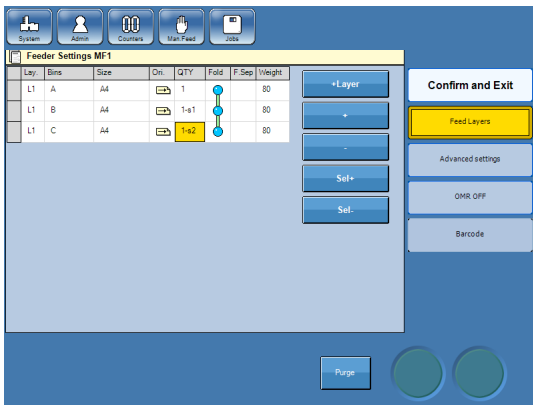
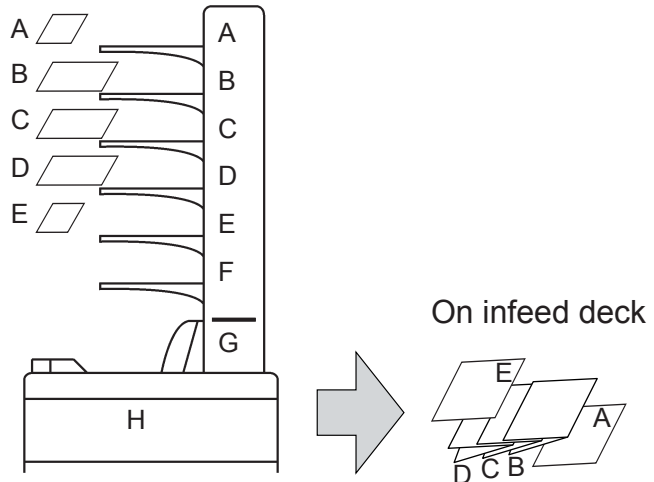
Examples of Mailfeeder Set Up, continued

4. Settings



Example 5

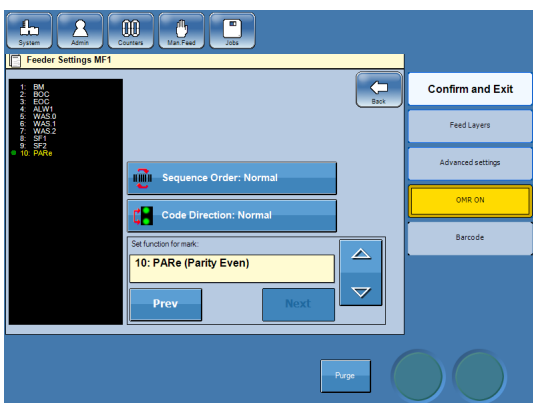
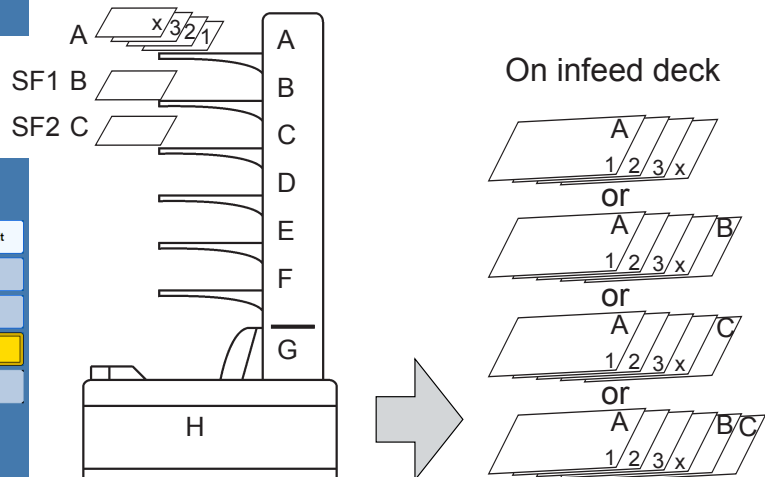
This example shows that a layer can consist of more than one sheet from more than one bin. One sheet will be fed from bin A, bypassing the Folder and then into the Inserter. Then one sheet each from bin B, C and D will be fed to the folder. In the Folder they will be v-folded together and then fed into the Inserter. Finally one sheet will be fed from bin E, bypassing the Folder and then into the Inserter.



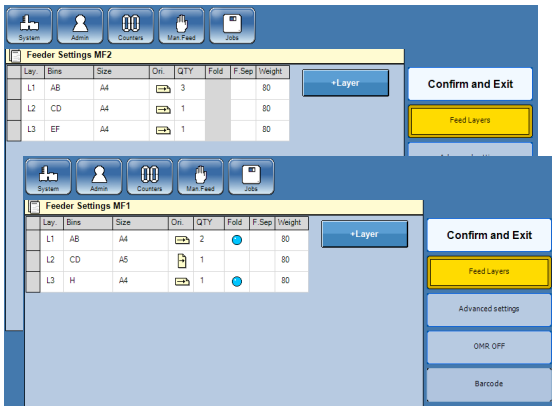
Example 6

Typical scanner setup. Variable number of sheets fed from the scanner bin (A) and zero, one or two selective feeds from B and/or C. All folded together.

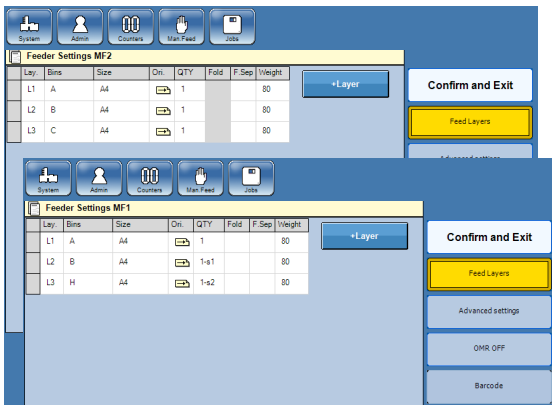
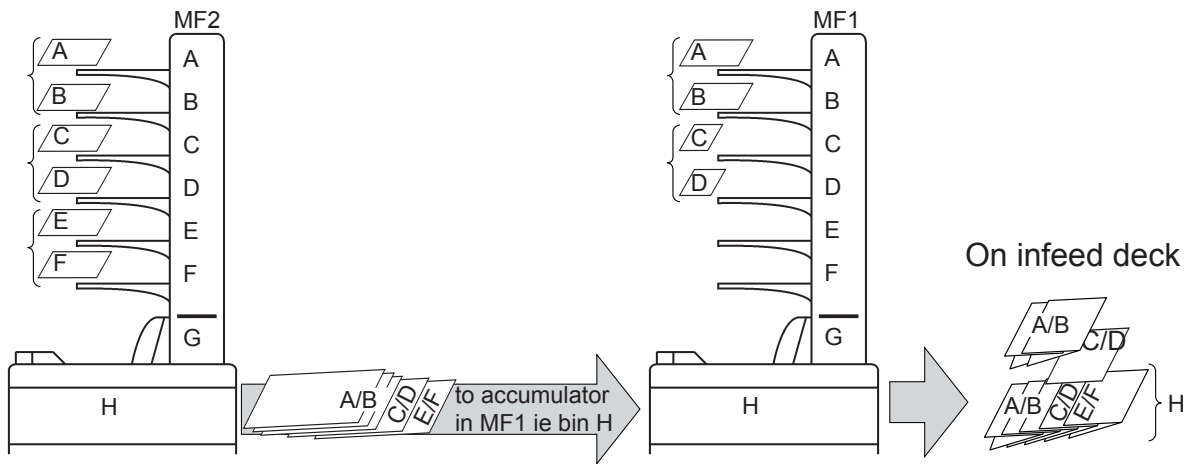
The OMR/BCR code, with safety functions like integrity check and counters, ensures individual handling of each set and guarantees the integrity of each sheet fed.



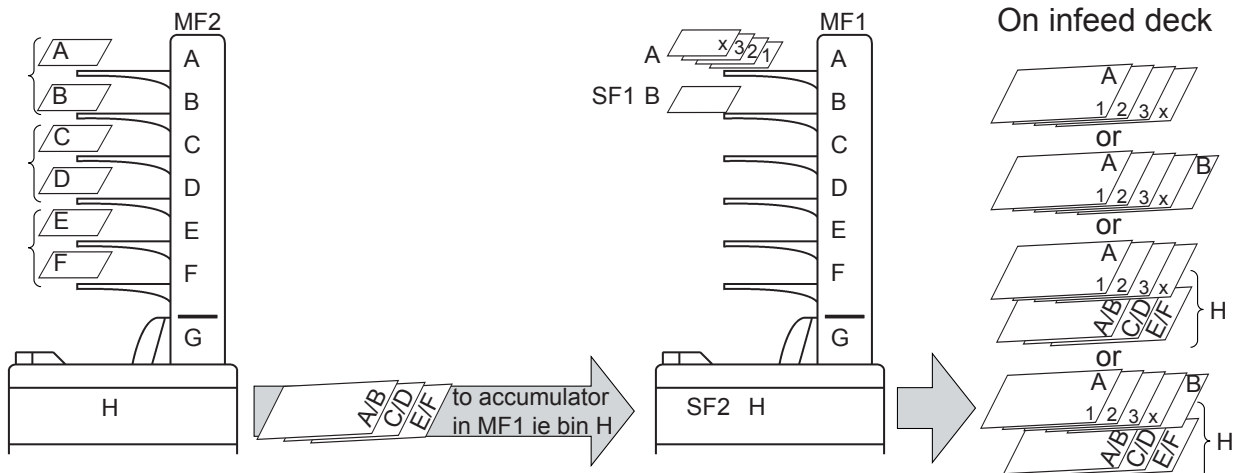
Examples of Mailfeeder Set Up, continued



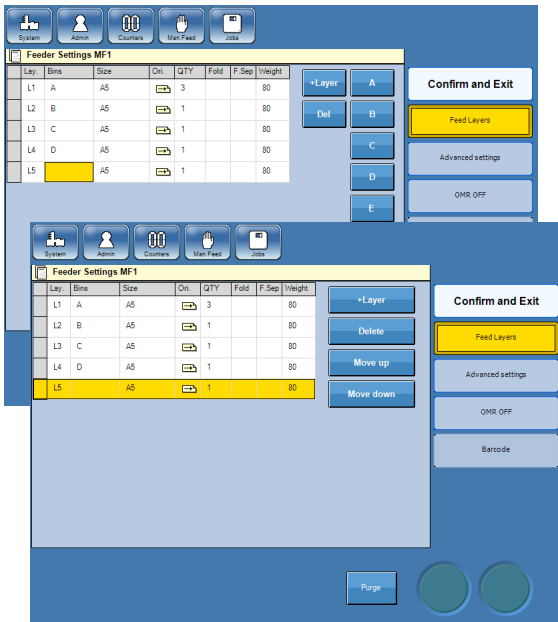
Example 7 - Two Mailfeeders, no OMR/BCR
 In this example both towerfeeders are individually used as a feeders and collators at the same time. MF2 is also using the linked bin feature and MF1 feeds mixed formats. The output sent to the infeed deck is a mixture of formats, folded and not folded material. Note that output from MF2 not can be split up.



Example 8 - Two Mailfeeders and OMR/BCR
 Variable number of sheets fed from the scanner bin (A) and zero, one or two selective feeds from B and/or H. Bin H on MF1 equals the output from MF2 and is here used as a selective feed. Note that output from MF2 not can be split up.



Adding a new Layer



- 1 From the Main screen, point at the Mailfeeder.
- 2 Press the [+Layer] button. A new layer will be added at the bottom of the list.
- 3 Point at the left most side of the layer so that the whole layer will be marked with yellow colour.
- 4 Use the [Move up] and [Move down] buttons to position the layer.
- 5 Setup the layer as described in section **Setting up a new Layer**.
- 6 Press the [Confirm and Exit button].

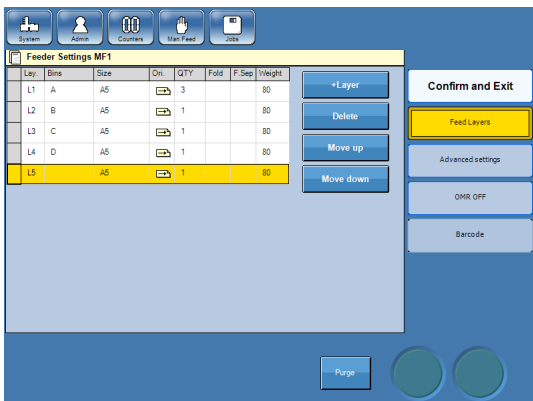
4. Settings

Editing a Layer



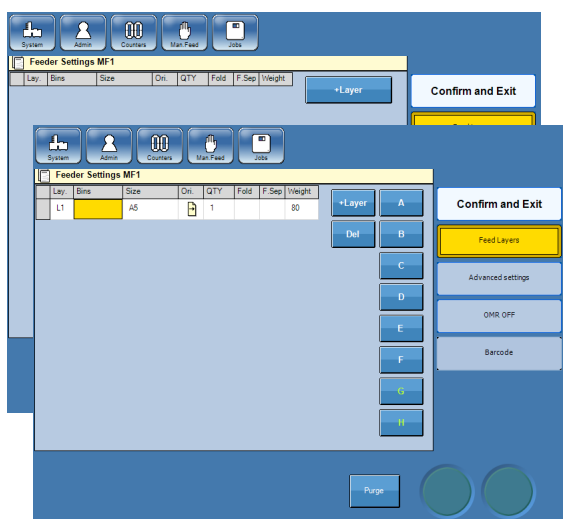
- 1 From the Main screen, point at the Mailfeeder.
- 2 Point at the setting you want to change and enter the new setting. For a comprehensive description of each setting, see section **Setting up a new Layer**.
- 3 Press the [Confirm and Exit button].

Deleting a Layer



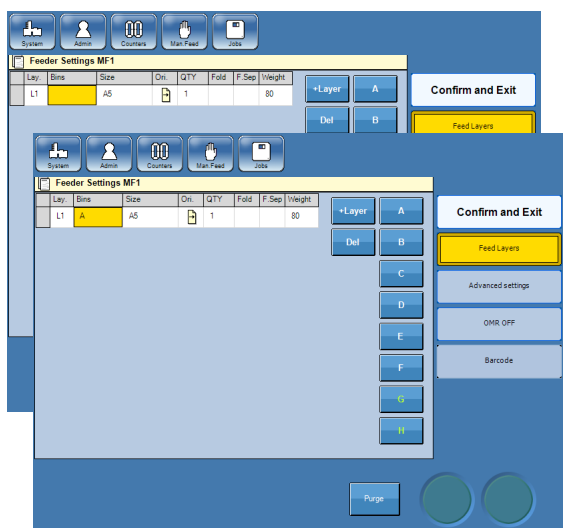
- 1 From the Main screen, point at the Mailfeeder.
- 2 Point at the left most side of the layer so that the whole layer will be marked with yellow colour.
- 3 Press the [Delete] button.
- 4 Press the [Confirm and Exit button].

Setting up a new Layer



- 1 From the Main screen, point at the Mailfeeder.
- 2 Press the [+Layer] button. A new layer will be added at the bottom of the list.
- 3 Choose which item to set-up or change by pointing at the corresponding square.

Selecting bins



- 1 Point at the square below the heading "Bins" in the layer in question.
- 2 Select feeders (A-H) to be used by pressing the corresponding button(s). If you want to change bin selection, press the [Del] button and press the correct bin button(s).



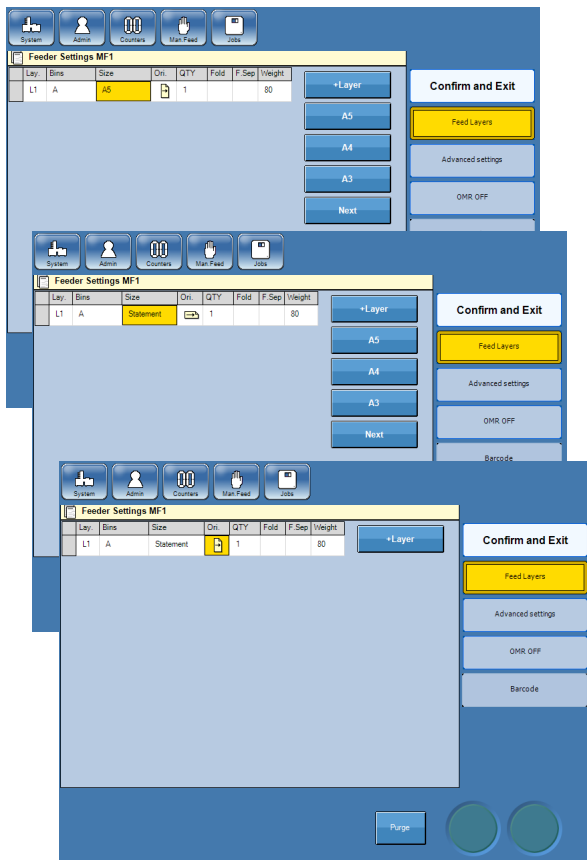
- 3 Two or more bins can be linked as in this example where bin A and B both are selected in layer 1. One sheet will be fed from bin A until the bin is empty. Then the Towerfeeder will automatically switch to feed from bin B. This setup makes it possible to refill papers during run.

Note

Multiple selections per layer is for linked bins (cascade) only and can not be used for bin A if OMR/BCR functionality is set to ON.

- 4 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Setting paper size and orientation

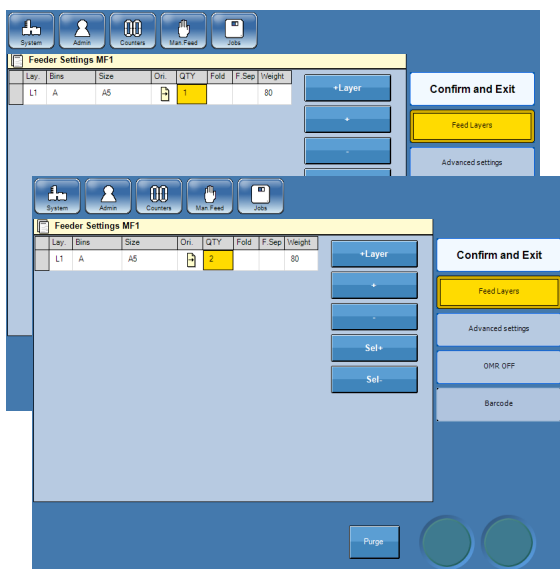


- 1 Point at the square below the heading “Size” in the layer in question.
- 2 Select size to be used by pressing the corresponding button or press the [Next] or the [Previous] button to scroll between all available formats.
- 3 Change orientation of an insert by pointing at the square below the heading “Ori.”.
- 4 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note

To create custom sized insert presets you need to be logged in as administrator.

Setting quantity

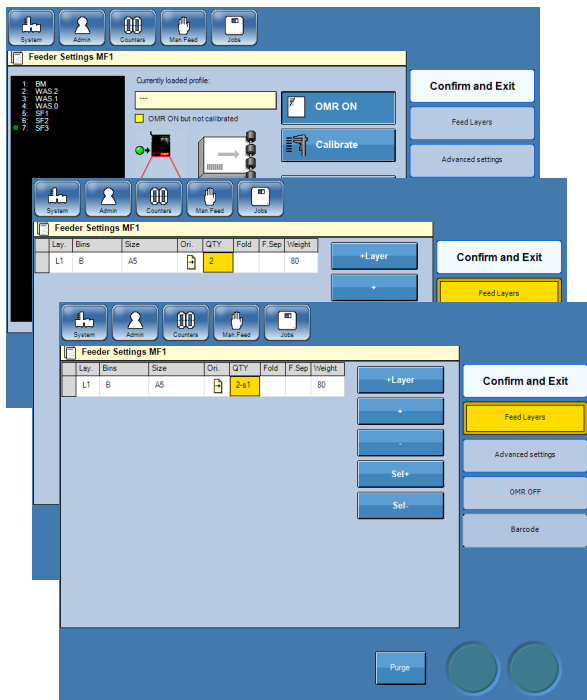


- 1 Point at the square below the heading “QTY” in the layer in question.
- 2 Change quantity by pressing the [+] or [-] button.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note

If the OMR/BCR functionality is set to ON, quantity for bin A must be 1.

Selective feed

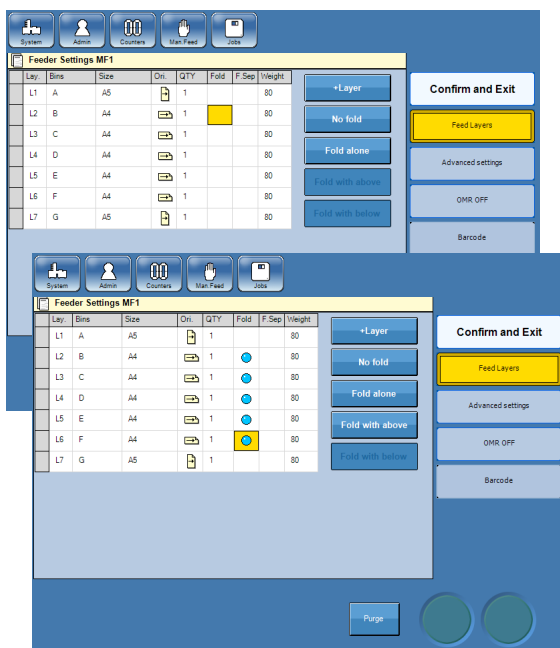


Selective feed is an OMR/BCR function that makes sure that a specific insert is added to the actual set. Selective feed can be set from s1 to s7.

- 1 Point at the square below the heading “QTY” in the layer in question.
- 2 Change id of the insert loaded in the chosen bin by pressing the [Sel+] or [Sel-] button.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note
Do not set bin A to selective feed.

Fold or no fold



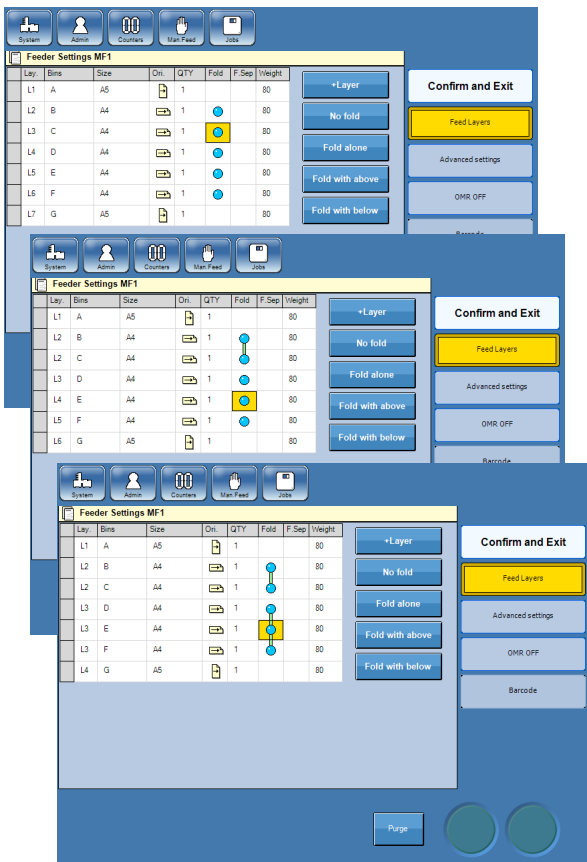
- 1 Point at the square below the heading “Fold” in the layer in question.
- 2 Select or deselect fold by pressing the [Fold alone] button.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Fold together options

The fold together option lets you fold sheets together by placing them in the same layer.

- 1 Point at the square below the heading “Fold” in the layer you want to fold together with another layer.
- 2 Press the [Fold with above] and/or [Fold with below] buttons.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note
Layers that are to be folded together have to be next to each other.

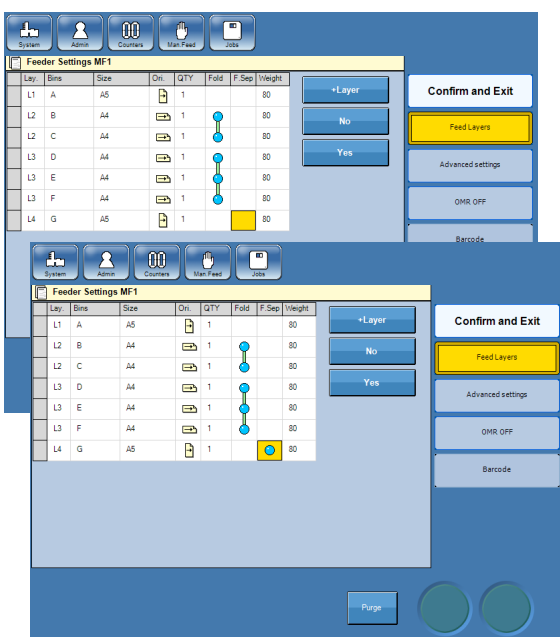


Selecting Separate Feed On or Off

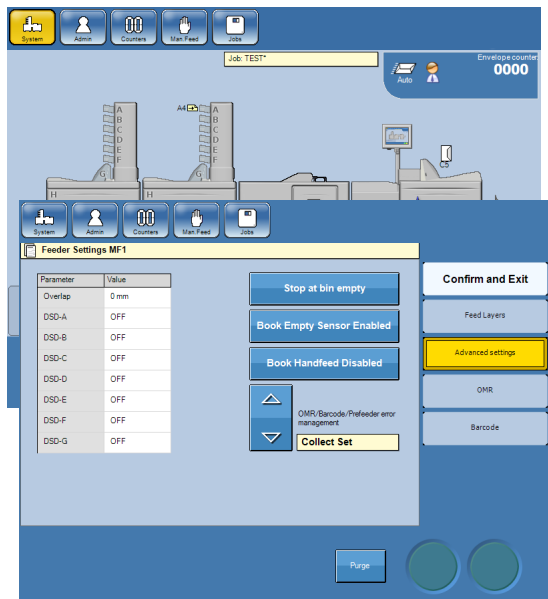
If feed separately is set to Yes, one sheet/booklet is fed onto the infeed deck before the next one starts to be fed. This procedure is more time-consuming than if feed separately is set to No, which allow the sheets/booklets to be fed continuously.

- 1 Point at the square below the heading “F.Sep” in the layer you want to fold separately.
- 2 Press the [Yes] button.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note
Some inserts, for example thick booklets, must be fed separately for operation to run trouble-free.

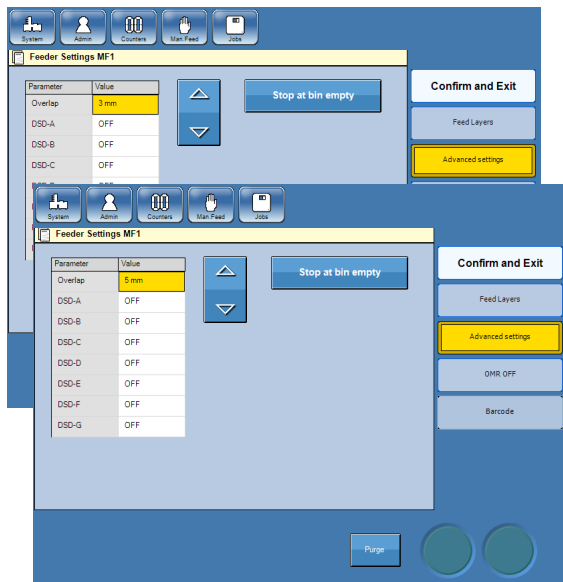


Advanced Settings



- 1 From the Main screen, point at the Mailfeeder.
- 2 Press [Advanced settings].
- 3 Choose which item to set-up or change by pointing at the corresponding rectangle. See following procedures.

Overlap



Small overlap value



Large overlap value

By default the inserts are fed onto the infeed deck with a small overlap. When using glossy paper the overlap may have to be increased to prevent problems while inserting or sealing. The default value is 3 mm (0.12”).

- 1 Press the [Advanced Settings] button.
- 2 Point at the square next to the heading “Overlap”.
- 3 To set the overlap, press the up / down arrow buttons.
- 4 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Note

This adjustment can also be done during run.

DSD (Double Sheet Detection)

The Double Sheet Detection, DSD, can have three different settings.

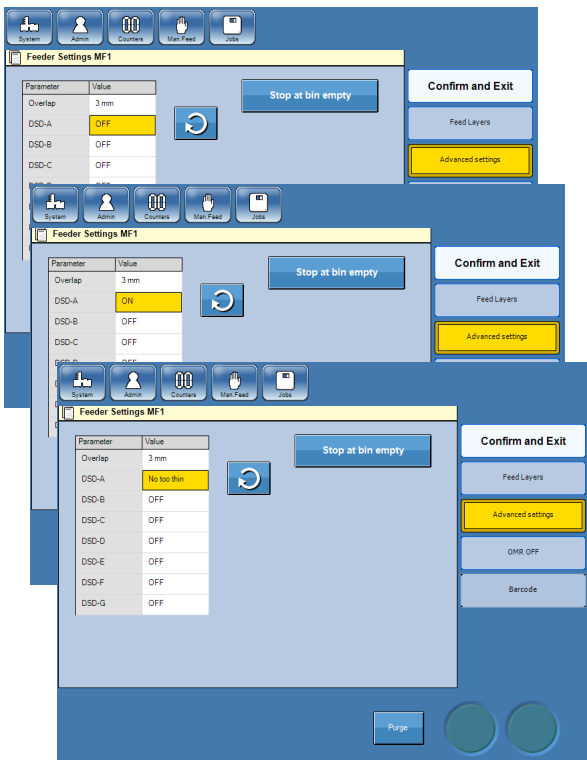
OFF - If the opacity of the sheets varies so much that the mailfeeder indicates false doubles, the double sheet detection (DSD) can be switched OFF. The DSD sensor only checks if a sheet is too long or too short.

ON - When the DSD sensor is switched ON it checks if a sheet is too long, too short, too thin or too thick.

NO TOO THIN - If the opacity of the sheets varies so much that the mailfeeder indicates false too thin but you still want to be warned about doubles. The double sheet detection (DSD) can be switched to NO TOO THIN. The DSD sensor only checks if a sheet is too long, too short or too thick.

Continued on next page.

4. Settings

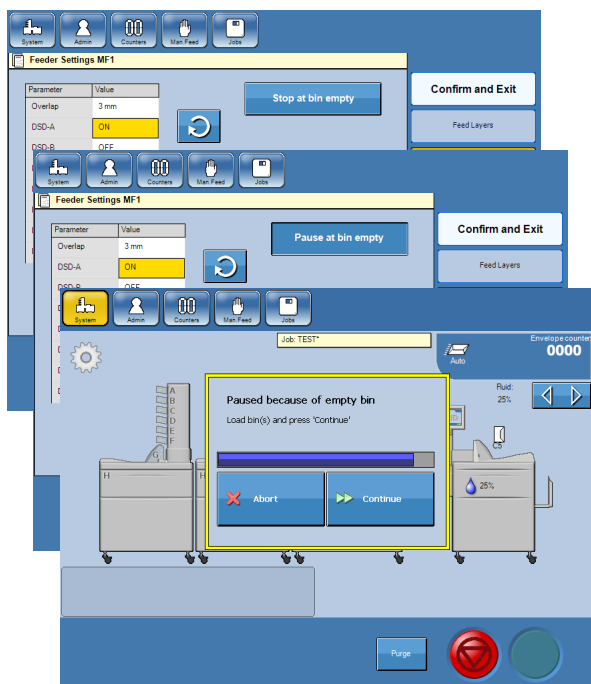


DSD (Double Sheet Detection), continued

To set the DSD to the desired setting:

- 1 Press the [Advanced Settings] button.
- 2 Point at the square next to the heading "DSD-X" for the bin in question.
- 3 Press the arrow button to set the DSD to the desired setting.
- 4 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Stop or Pause at bin empty

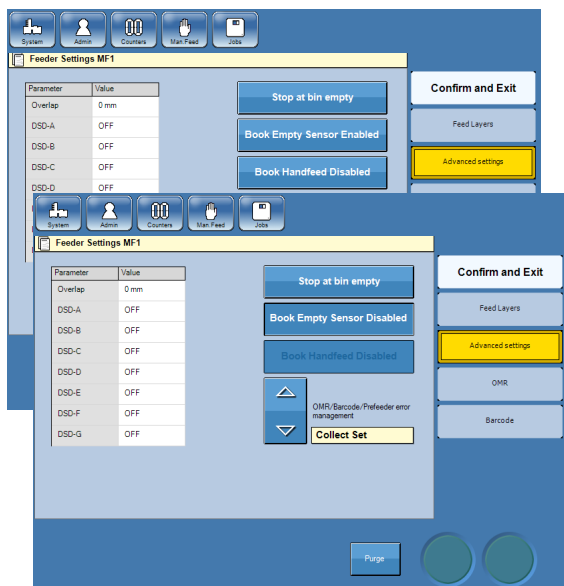


You can choose between stopping or pausing the system when a bin becomes empty. The default setting is that the system stops. To instead have the system to pause, allowing you to reload the bin, select “Pause at bin empty”. When the message “Paused because of empty bin” is shown, reload the bin and press the [Continue] button. If the bin is not reloaded within one minute, the system will stop.

To alter the setting:

- 1 Press the [Advanced Settings] button.
- 2 Point at the button [Stop/Pause at bin empty] to alter setting.
- 3 Continue with other layer changes or press the [Confirm & Exit] button if you are done changing layer settings.

Book Empty Sensor

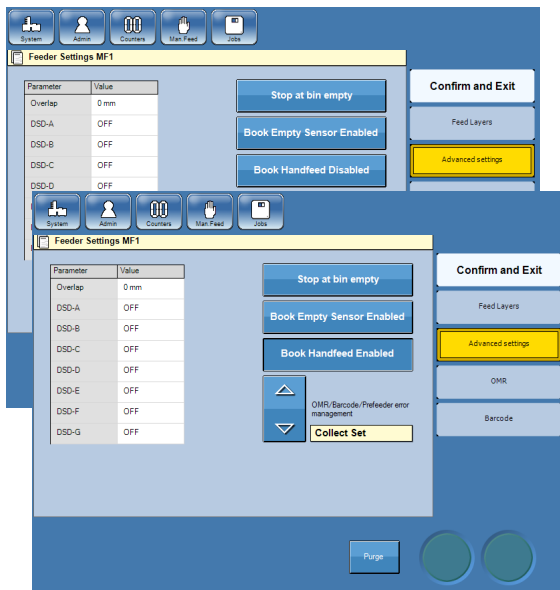


If the function Book Empty Sensor is enabled, the system will stop when it is detected that the bookletfeeder bin has run out of books. If you are feeding books that are very dark, black or otherwise difficult for the sensor to detect, the sensor might incorrectly detect the bin as empty and stop the system. To avoid that, you can disable the function by pressing the button [Book Empty Sensor Enabled]. Button will now instead read [Book Empty Sensor Disabled].

Note

If you disable the Book Empty Sensor, the possibility to handfeed books will also be disabled. The Book Handfeed function is no longer accessible.

Book Handfeed



In order to manually feed books, you will have to enable the Book Handfeed function. To do that, press the [Book Handfeed Disabled] button so it instead will read [Book Handfeed Enabled].

With this function enabled, the Mailfeeder will wait for the sensor to be actuated (covered) before the feeding sequence will be started.

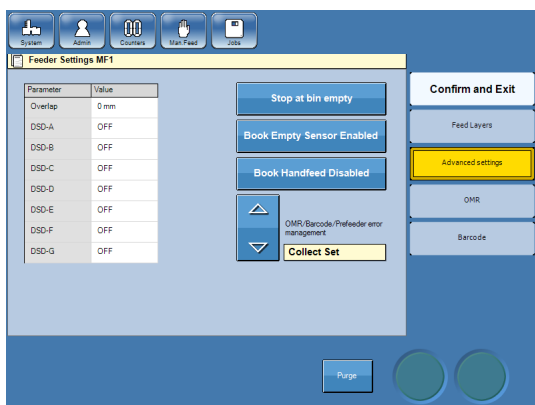
Note

It is only possible to enable the Book Handfeed function when the Book Empty Sensor is enabled (see above).

The system will cycle down automatically if the sensor is not covered within one minute.

4. Settings

OMR / Barcode / Sheet Feeder error management



This function allows the user to choose between three different options for error management:

- No sealing;
- Stop;
- Collect Set.

Toggle between these three options by pressing the up/down arrows.

In stand-alone mode, as soon as the reader detects a wrong reading:

- If “**No sealing**” is selected, the system will continue to process the job and will insert the complete faulty set into an envelope which will be delivered unsealed.
NOTE! Caution must be used when the “no sealing” option is selected and the system does not contain an output divert module;
- If “**Stop**” is selected, a message will be shown on the UI and the system will stop delivering envelopes immediately after the wrong reading.

In this case, the operator will have to:

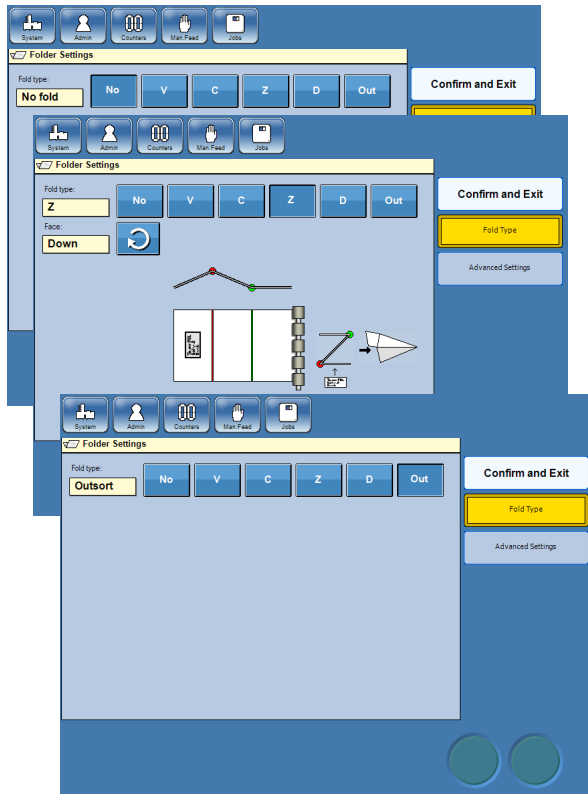
1. open the hatch of the infeed deck and clear the paper,
2. clear the remaining paper of the faulty set in the feeder;

- If “**Collect Set**” is selected, the system will stop delivering envelopes and will deliver the complete faulty set to the infeed deck without inserting it into an envelope.

In this case the operator will have to open the hatch of the infeed deck and clear the paper.

MFF Folder Settings

The folder basically has three different functions. It can fold one of four different fold types, it can be by-passed when not in use and it can be used as a stacker for material fed from the Mailfeeder.



1 From the Main screen, point at the Folder.

2 To deactivate the Folder, press the [No] button. Do this when no sheets or sets require folding to avoid that the Folder initiates when cycle up.

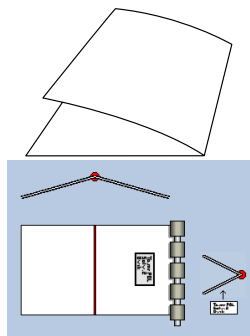
To activate the Folder, press the [V], [C], [Z] or the [D] button. The different fold types will be described below.

To use the Folder as a stacker for the Mailfeeder, press the [Out] button. Sets or sheet will be delivered to the outsort bin on top of the Folder.

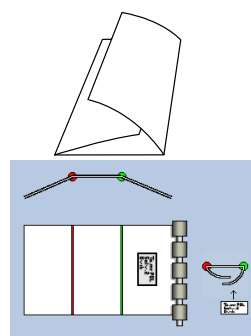
3 Press the [Confirm & Exit] button.

4 Perform a calibration. If applicable and necessary, adjust fold length(s) and address position.

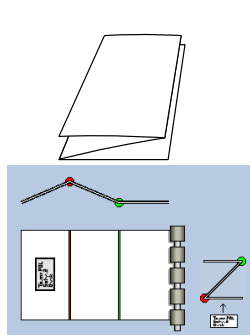
Fold types



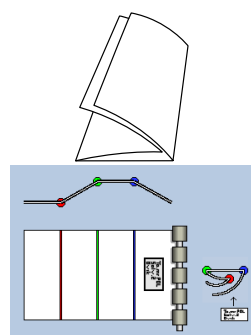
V fold



C fold



Z fold



Double

Four different types of folds can be produced in the Folder.

V fold - The sheets will be folded once.

C fold - The sheets will be folded twice and take the appearance of the letter C.

Z fold - The sheets will be folded twice and take the appearance of the letter Z.

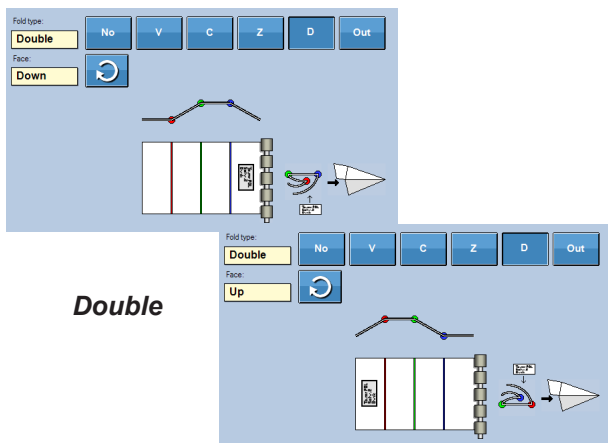
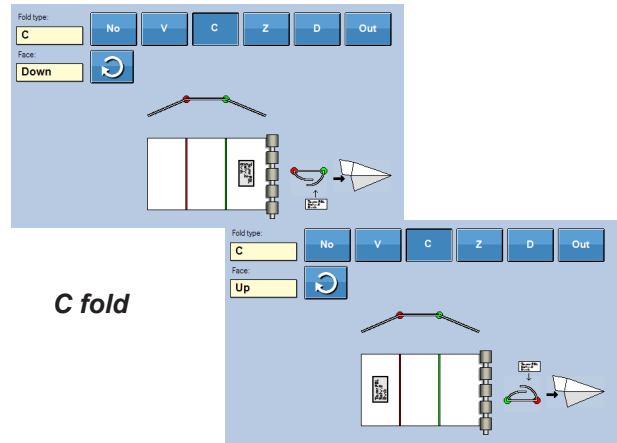
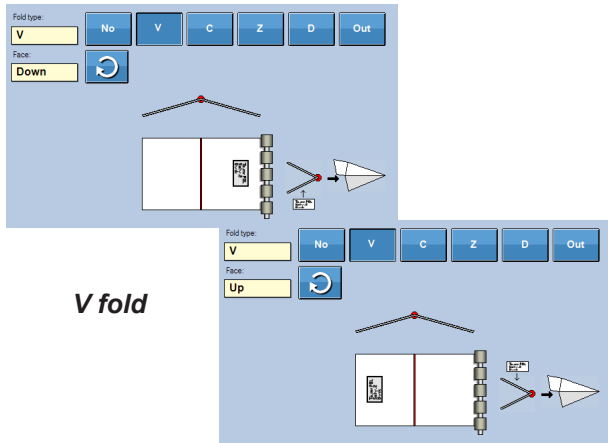
Double - The sheet will be V-type folded two times.

Custom Fold - You can custom set all three fold pockes individually to create a custom fold.

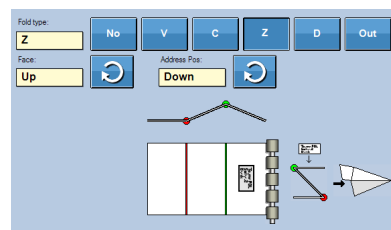
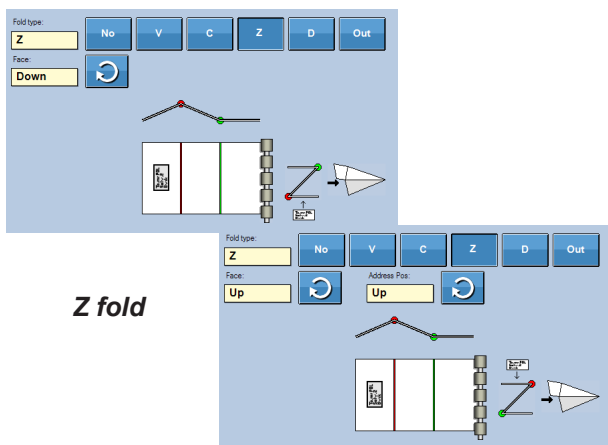
Sheet Placement

Use the loop arrow button next to "Face:" to set if the address should be facing up or down when the folded sheet(s) reaches the infeed deck. The user interface shows graphically how the bin must be loaded in order to achieve to required result.

4. Settings

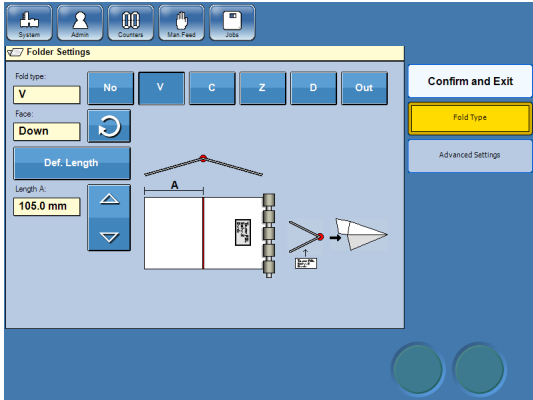


Z fold is similar but also offers the possibility to have the folds mirrored when you choose to have the address facing up.

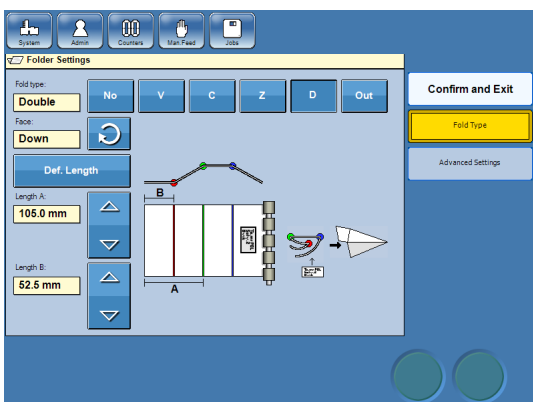
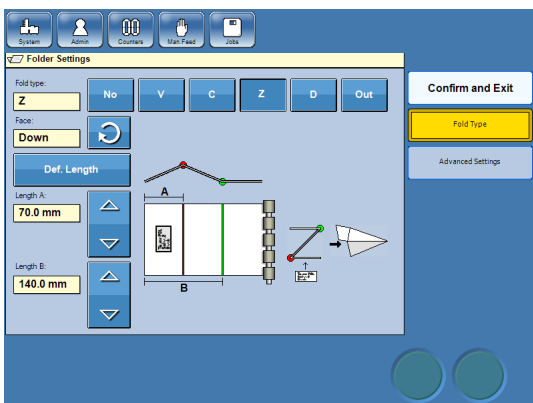
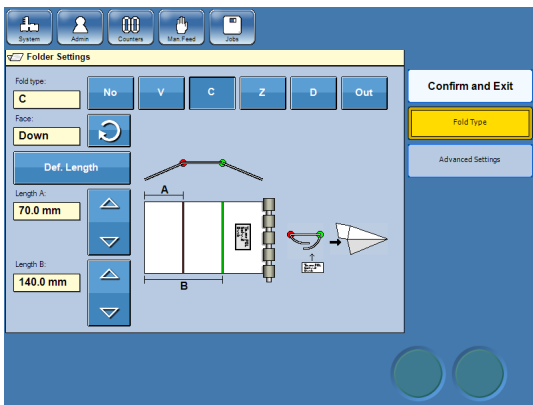


Adjusting fold length(s)

To more precise position the address in the envelope, the fold length can be adjusted. Depending of fold type one or two fold lengths might be adjusted.

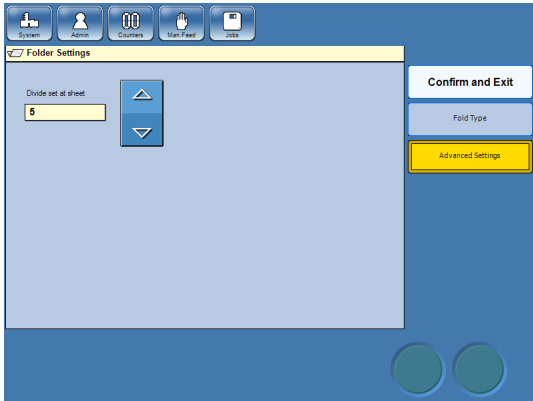


- 1 From the Main screen, point at the Folder.
- 2 Change the desired fold length.
- 3 Press the [Confirm & Exit] button.
- 4 Perform a calibration.
- 5 Repeat until you are satisfied with the result.



Advanced settings

If the set to be folded contains more sheets than the MFF specifications allow, it can be divided.



- 1 From the Main screen, point at the Folder.
- 2 Press the [Advanced Settings] button.
- 3 Use the pointed arrow buttons to set at which sheet the set should be divided.

 **Note**

See section **9. Specifications** for guidance regarding maximum number of sheets possible to fold together.

- 4 Press the [Confirm & Exit] button.
- 5 Perform a calibration.

OMR

OMR - Optical Mark Recognition or Optical Mark Reading - is an option for scanning in the Tower Feeder which scans the paper to detect the presence or absence of marks in a pre-determined position. The OMR interpreting facility in the system is completely flexible and programmable to match any OMR code.

The interpreting of OMR in the system can be divided into two main objectives. Safety (integrity) and machine control.

Safety functions

The safety functions are there to make sure that the OMR has read the code completely, correctly and to guarantee the integrity of each sheet fed.

IGNore (IGN)

This function is to tell OMR to ignore certain marks. This if the OMR code used has got marks not supported by the system or that certain marks should be ignored.

PARity Even (PARE)

If parity even is set, the total number of marks at every reading must be even. If the actual number of marks is an odd number, use PARE to add a mark to make the total number of marks even.

PARity Odd (PARo)

If parity odd is set, the total number of marks at every reading must be odd. If the actual number of marks is an even number, use PARo to add a mark to make the total number of marks odd.

Wrap Around Sequence (WAS)

This is a counter that checks that certain defined marks on each sheet follows in the right order ***within a sequence***.

The counter starts and stops at a value of your choice but increases/decreases by 1 (one) for every sheet fed. After reaching the end value, the counter starts all over again.

This continues throughout the whole feeding sequence no matter how many sets are processed.

Counting is binary and the reading direction must be specified since the result differs.

Binary code 100 read from left to right equals 1 (one).

Same binary code read from right to left equals 4 (four).

ALWays 0 (ALW0)

This is an integrity check. If always 0 (zero) is defined in the OMR profile, the reader expects a 0 (zero) in this position on every sheet. Anything else will be regarded as an integrity error.

ALWays 1 (ALW1)

This is an integrity check. If always 1 (ONE) is defined in the OMR profile, the reader expects a 1 (ONE) in this position on every sheet. Anything else will be regarded as an integrity error.

Set Integrity (SI)

This is a set integrity check to verify that all sheets in a set carry the same SI value. For the next set, the value must be different. How is not important, see example below.

| Set | Sheet | SI value |
|-----|-------|----------|
| 1 | 1 | 111 |
| 1 | 2 | 111 |
| 1 | 3 | 111 |
| 2 | 4 | 000 |
| 3 | 5 | 100 |
| 3 | 6 | 100 |

Set SeQuence (SSQ)

This is a counter that checks that certain defined marks on each sheet follows in the right order **within the set**. The difference, compared to WAS, is that the SSQ starts over for each set.

The counter starts and stops at a value of your choice but increases/decreases by 1 (one) for every sheet fed. After reaching the EOC mark (see below), the counter starts all over again at the next set.

This continues throughout the whole feeding sequence no matter how many insertions that are done.

Counting is binary and the reading direction must be specified since the result differs.

Binary code 100 read from left to right equals 1 (one).

Same binary code read from right to left equals 4 (four).

Machine control functions

The machine control function tells the system how to handle each individual set of documents.

Beginning Of Collation (BOC)

This mark represents the start of a new set. The feeder will feed sheets until an end of set mark (EOS) is detected.

End Of Collation (EOC)

This mark represents the end of a set. The set will now be handled as programmed. For example folded and then inserted into an envelope.

Selective Feed 1 to 7 (SF1 to 7)

When this mark is detected, one or more selected enclosures will be added to the actual set. The next set will not have any enclosures added unless a new SFX mark is detected.

Note

The SFX mark **must be present** on the first sheet of the new set.

Hand Feed Last (HFI)

Hand feed last means that the actual set shall have some material manually added on top of the set before it is inserted. When this mark is detected, the actual set will be paused on the infeed deck on the inserter. Infeed deck interlock will be disabled. Open the infeed deck cover, add material manually and press the pedal to complete the cycle.

Note

The HFI mark **must be present** on the first sheet of the new set.

Hand Feed First (HFf)

Hand feed first means that the actual set shall have some material manually added at the bottom of the set before it is inserted. When this mark is detected, the system will be paused and the infeed deck interlock disabled. The operator can now open the infeed deck cover feed the material to the infeed deck. When the pedal is pressed, the system will complete its cycle.

Note

The HFf mark **must be present** on the first sheet of the new set.

DiVert Finished (DVF)

When this mark is detected, the actual set will be processed **without** having the envelope sealed. The next set will have the envelope sealed unless a new DVF mark is detected.

 **Note**

The DVF mark **must be** present on the first sheet of the new set.

DiVert to Deck (DVD)

When this mark is detected, the actual set will be transported to the outsort bin on the folder. The next set will be processed as programmed unless a new DVD mark is detected.

 **Note**

The DVD mark **must be** present on the first sheet of the new set.

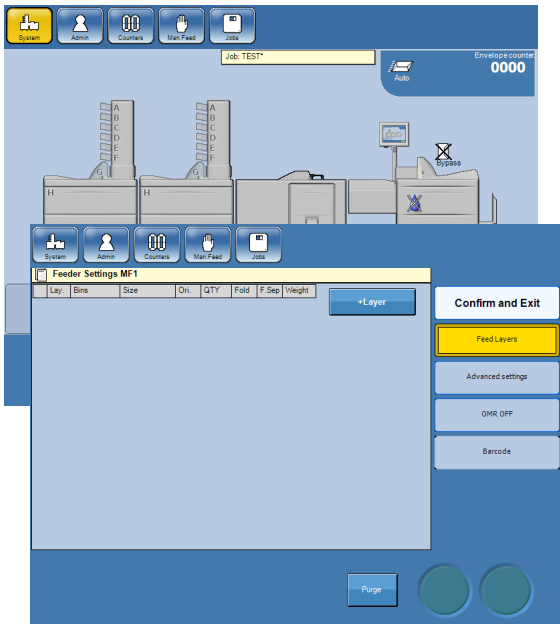
STop (ST)

When this mark is detected, the system will stop after the actual set has been processed.

 **Note**

The ST mark **must be** present on the first sheet of the new set.

Creating an OMR profile



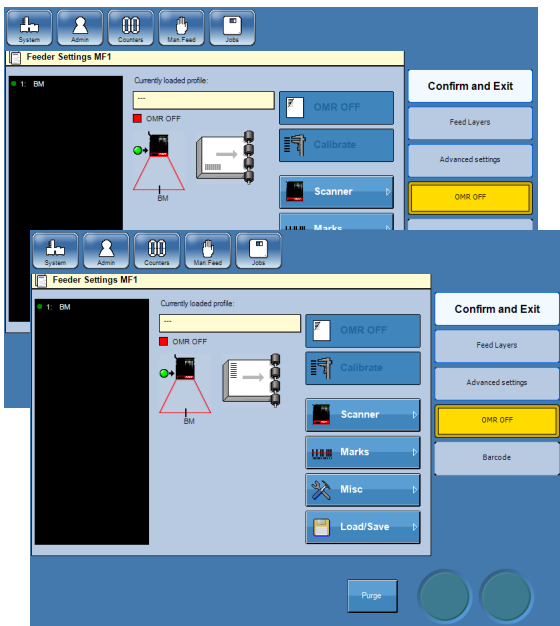
Check the specification of the OMR code for the job to determine number of marks and function for each mark.

- 1 From the main screen, point at the feeder.
- 2 Point at the [OMR] button.

Note:

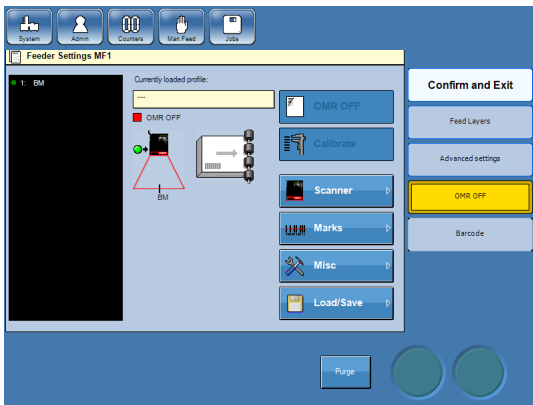
Also set the error management as described under “Advanced” in the MF Mailfeeder Settings section of this manual.

Defining OMR marks reading direction

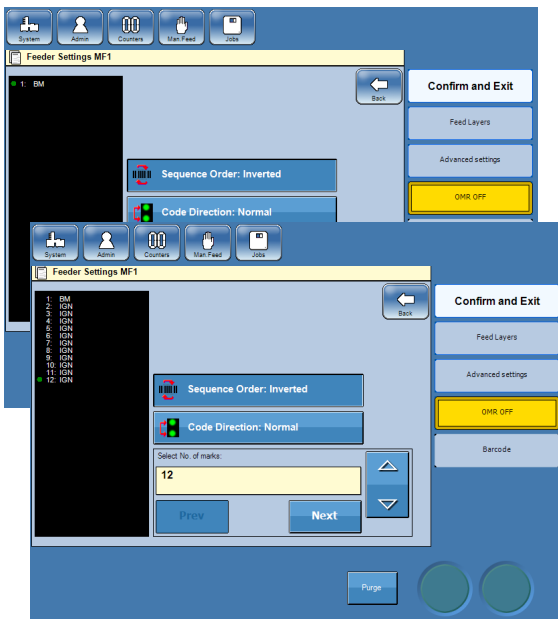


- 1 Define how the OMR marks should be read, ladder or picket fence (see **9 Specifications** for explanation), by pressing the paper stack on the screen.

Setting number of OMR marks



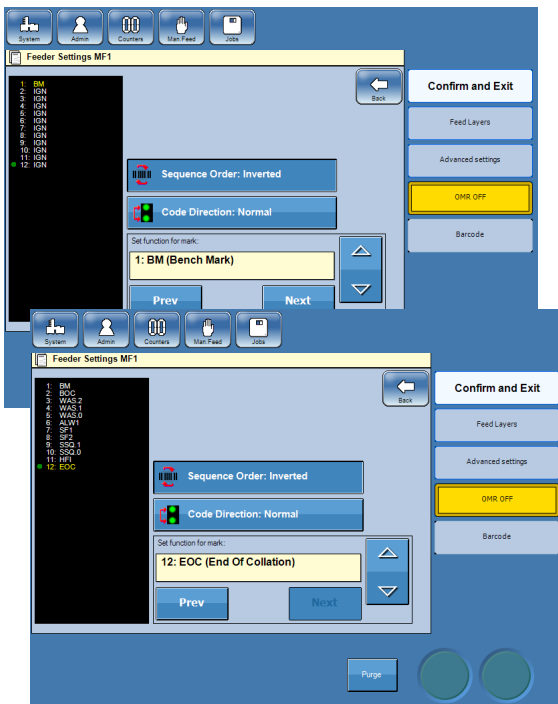
1 Point at the [Marks] button.



2 Select number of marks using the pointed arrow buttons.

Continue with defining the OMR marks.

Defining the OMR marks



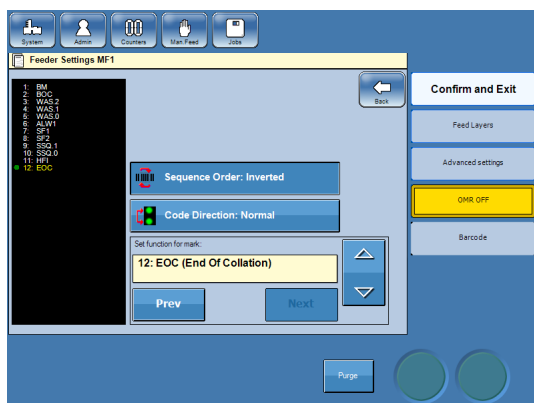
After setting the number of OMR marks, press the [Next] button to set the function for each mark. Selected mark will be shown with yellow letters. Press the pointed arrow buttons to select function.

Press the [Next] button again to select the next mark and press the pointed arrow buttons to select function of that mark and so on.

Note

The first mark to be programmed is always a start mark (BM).

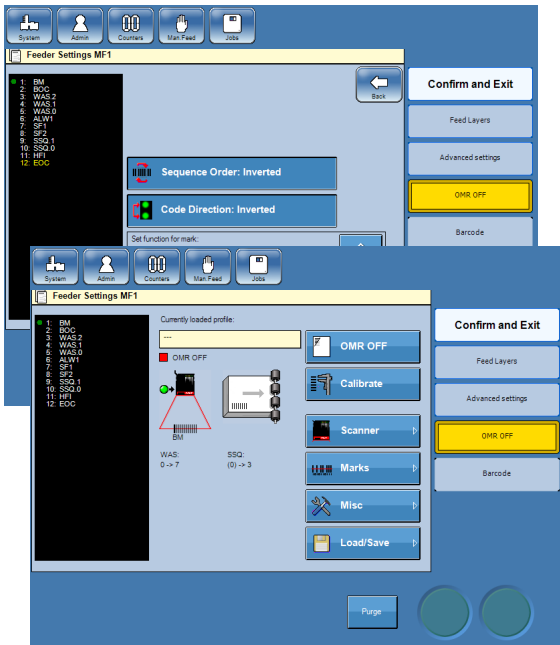
Continue with setting the OMR code direction.



The list below shows all available functions and in the order they appear.

- 1 IGN (Ignore)
- 2 BM (Bench Mark)
- 3 PARe (Parity Even)
- 4 PARo (Parity Odd)
- 5 WAS (Wrap Around Sequence)
- 6 BOC (Beginning of Collation)
- 7 EOC (End of Collation)
- 8 NBOC (Inv. Beginning of Collation)
- 9 NEOC (Inv. End of Collation)
- 10 ALW0 (Always 0)
- 11 ALW1 (Always 1)
- 12 SF1 (Selective Feed 1)
- 13 SF2 (Selective Feed 2)
- 14 SF3 (Selective Feed 3)
- 15 SF4 (Selective Feed 4)
- 16 SF5 (Selective Feed 5)
- 17 SF6 (Selective Feed 6)
- 18 SF7 (Selective Feed 7)
- 19 SI (Set Integrity)
- 20 S SQ (Set Sequence)
- 21 HFf (Hand Feed First)
- 22 HFI (Hand Feed Last)
- 23 DVF (Divert Finished)
- 24 DVD (Divert to Deck)
- 25 ST (Stop)

Setting OMR code direction



When all marks are defined, the code direction i.e. where the start mark is in relation to the green mark on the OMR reader must be set. This can be done either by pressing the [Code Direction] button or by pointing at the beam after pressing the [Back] button. The green dot in the OMR function list will indicate from which direction the OMR code is read. Also the “Code Direction” will change between “Normal” and “Inverted” when altered.

Continue with:

Setting up WAS and/or SSQ counters (if present)

or

Saving OMR profiles.

WAS and/or SSQ counters

| 4 | 2 | 1 | Sum |
|---|---|---|-----|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 2 |
| 0 | 1 | 1 | 3 |
| 1 | 0 | 0 | 4 |
| 1 | 0 | 1 | 5 |
| 1 | 1 | 0 | 6 |
| 1 | 1 | 1 | 7 |

Binary count

| Inverted direction | WAS2 | WAS1 | WAS0 | Normal direction |
|--------------------|------|------|------|------------------|
| 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 1 | 1 |
| 2 | 0 | 1 | 0 | 2 |
| 6 | 0 | 1 | 1 | 3 |
| 1 | 1 | 0 | 0 | 4 |
| 5 | 1 | 0 | 1 | 5 |
| 3 | 1 | 1 | 0 | 6 |
| 7 | 1 | 1 | 1 | 7 |

OMR count, normal and inverted direction

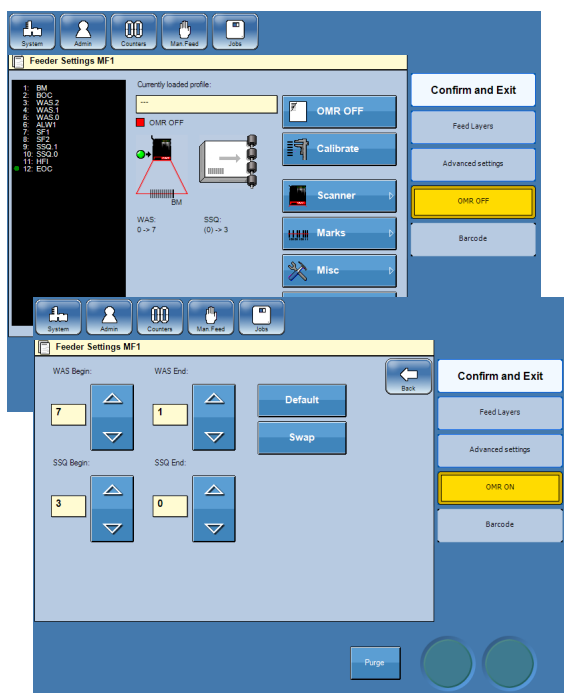
If counters like WAS (Wrap Around Sequence) or SSQ (Set Sequence) are present in the OMR code, min (begin) and max (end) value as well as direction must be set.

Both the WAS and the SSQ counter are binary counters. The binary system only has two numbers 0 or 1 (for OMR no mark or mark). First number (mark) represents the value 1, next the value 2, next value 4 and so on. The sum is normally calculated from right to left as in the Binary count figure to the left. A three digit binary code can therefore have eight different values from 0 to 7.

Looking at this OMR count figure to the left (using the WAS counter as an example), the difference in value when counting from either direction is clearly shown. The same applies for the SSQ counter.

Continued on next page.

WAS and/or SSQ counters, continued



1 To set min (begin) and max (end) value and reading direction, press the [Misc] button.

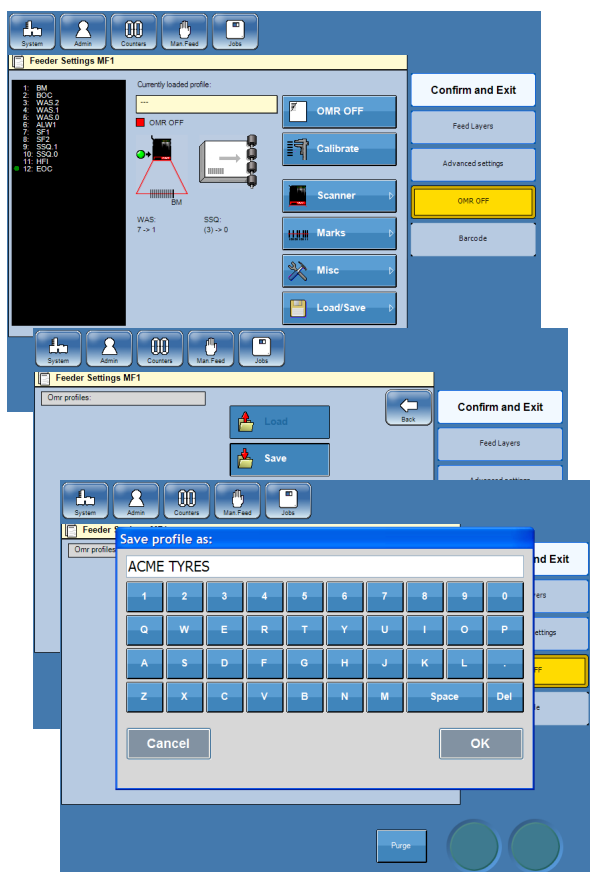
2 Set min and max value by pressing the corresponding pointed arrow buttons. Min and max value can be set separately. Alter the reading direction by pressing the [Swap] button. Reading direction will be changed for both the WAS and the SSQ together.

Press the [Back] button.

Saving OMR profiles

Note

To be able to store settings you have to be logged in as an administrator, see section 1 **Basics**.



Saving OMR profiles work in the same manner as saving jobs. See storing, deleting and re-naming jobs in section 3. **Jobs**.

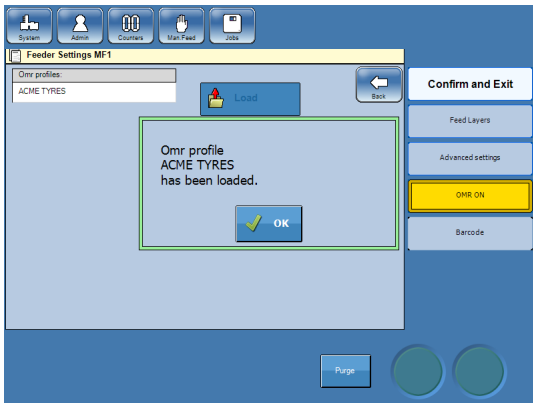
1 Save the OMR profile by pressing the [Load/Save] button.

2 Press the [Save] button.

3 Enter a name for the OMR profile and press the [OK] button.

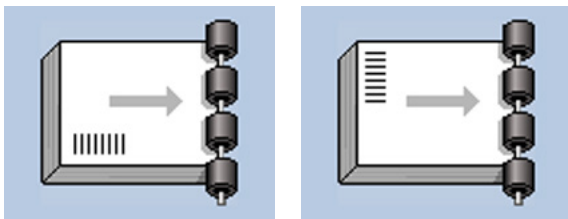
Using an OMR profile

4. Settings

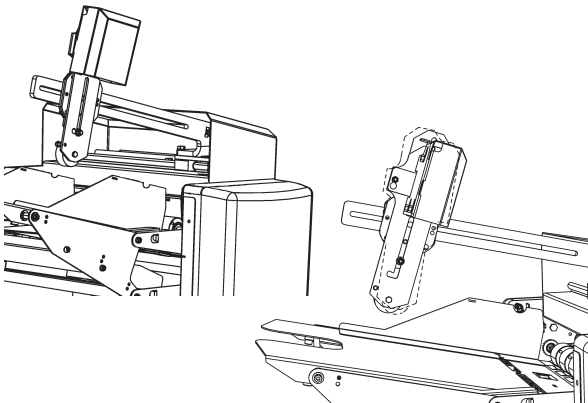


1 Create (see previously in this section) or load an existing OMR profile:

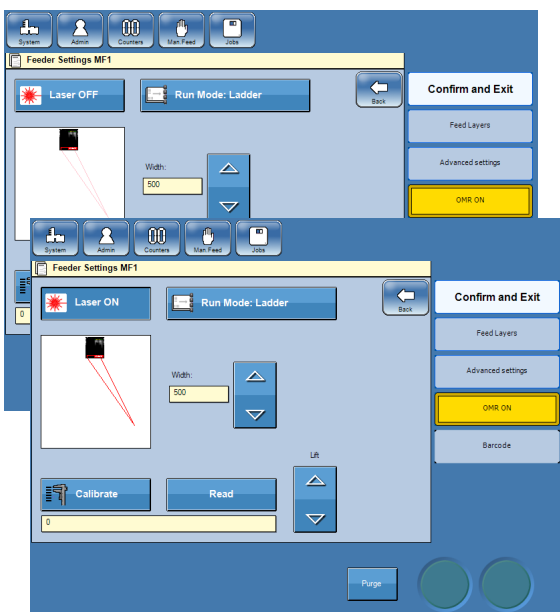
- Point at the feeder.
- Press the [OMR] button.
- Press the [Load/Save] button.
- Point at the OMR profile.
- Press the [Load] button.
- Confirm by pressing the [OK] button.



2 Place the calibration sheet for the actual job and place it in bin A.



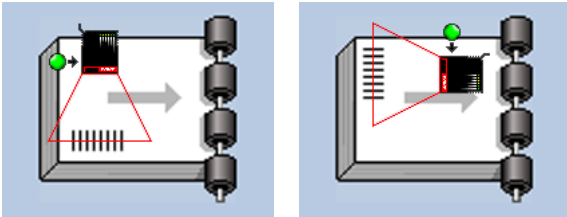
3 Make sure that the OMR reader is physically positioned correctly (fence/ladder) to read the OMR marks, see **1 Basics, Positioning the scanner.**



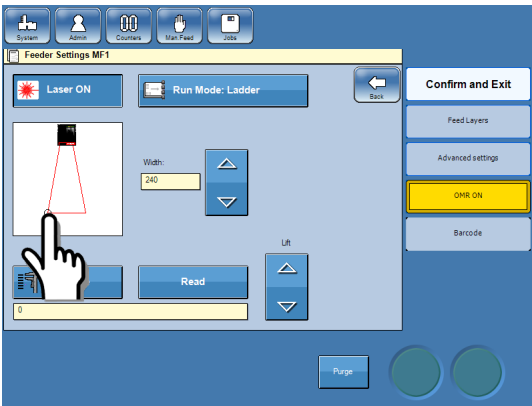
4 Turn on the laser by pressing the [Scanner] button and the press the [Laser] so it goes from “OFF” to “ON”.

Continued on next page.

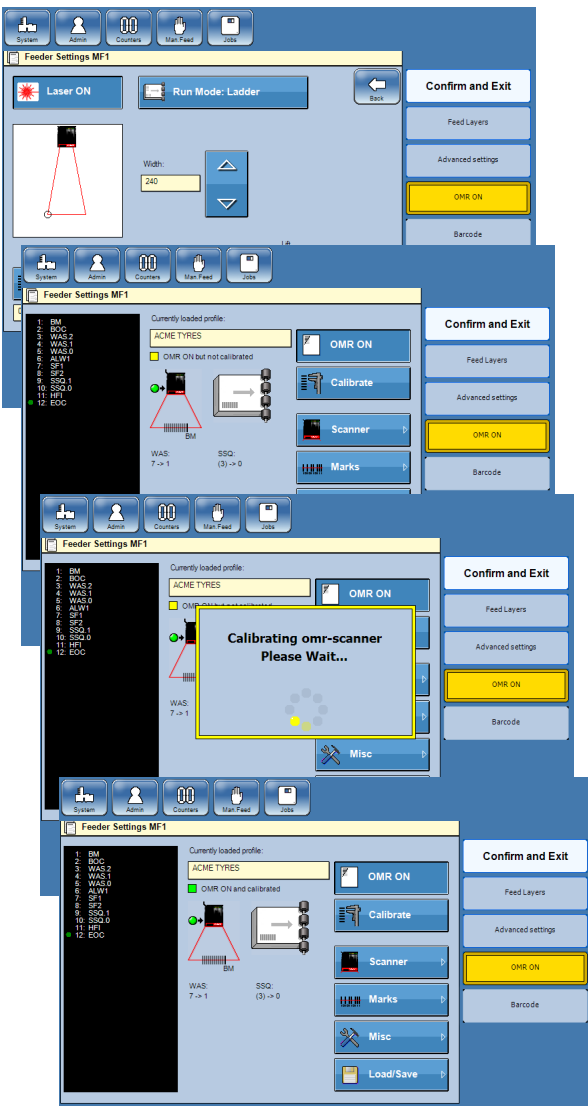
Using an OMR profile, continued



5 Position the laser beam in the middle of the OMR marks.



6 Adjust the laser beam width so that it is approximately 10-15 mm (0.4-0.6") wider than the OMR marks on both sides. Either by pressing the pointed arrows or by just pointing at the beam and drag.



7 Perform a calibration. This is done either by pressing the [Calibrate] button from the same screen or by first pressing the [Back] button and then the [Calibrate] button. The feeder will pull the top sheet a little.

8 After a successful calibration, remove the calibration sheet. Press the [OMR] button so it goes from "OFF" to "ON". Now the OMR is set up and you can continue setting up and loading the rest of the system

OMR after power off/power on

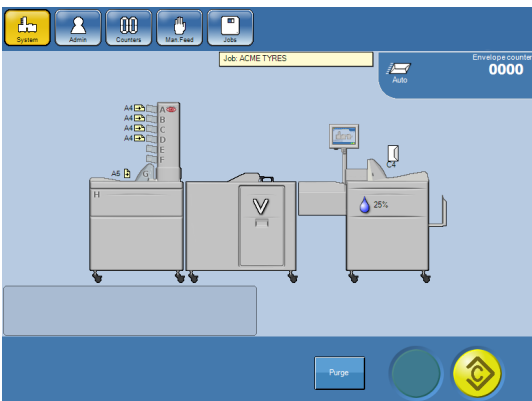
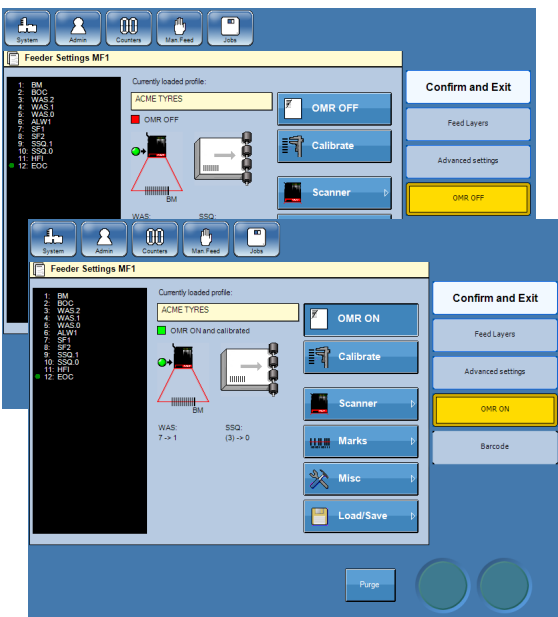
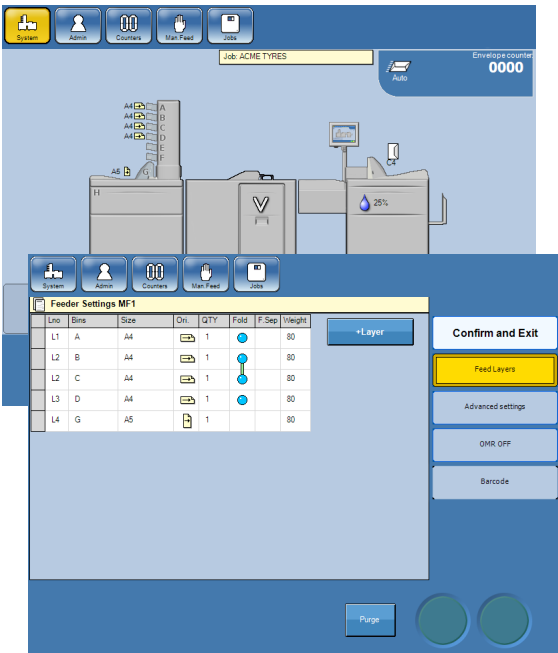
After the system has been powered off and then powered on, all job and OMR settings will remain but the scanner is switched off.

1 To switch the scanner on, point at the feeder and then press the [OMR] button.

2 Switch the scanner from OFF to ON by by pressing the [OMR OFF] button.

3 System is now ready.

4. Settings



BCR

BCR - Barcode recognition - is an option added to the Tower Feeder to provide scanning of paper to detect the widths and spacings of parallel lines in a predetermined position. The BCR interpreting facility in the system handles Code 39, Code 128, I2 of 5, DataMatrix and PDF417 .

The interpreting of BCR in the system can be divided into two main objectives. Safety (integrity) and machine control.

Safety functions

The safety functions are there to make sure that the BCR guarantees the integrity of each sheet fed.

IGNore (IGN)

The ignore functionality is achieved by setting both start and end characters and bits to "IGN".

Wrap Around Sequence (WAS)

This is a counter that checks that certain defined marks/characters on each sheet follows in the right order **within a sequence**.

The counter starts and stops at a value of your choice but increases/decreases by 1 (one) for every sheet fed. After reaching the end value, the counter starts all over again.

This continues throughout the whole feeding sequence no matter how many sets are processed.

Scanner

Counting is binary and the reading direction must be specified since the result differs.

Binary code 100 read from left to right equals 1 (one).

Same binary code read from right to left equals 4 (four).

Camera

Counter is decimal using complete character value.

Set Sequence (SSQ)

This is a counter that checks that certain defined marks/characters on each sheet follows in the right order **within the set**. The difference, compared to WAS, is that the SSQ starts over for each set.

The counter starts and stops at a value of your choice but increases/decreases by 1 (one) for every sheet fed. After reaching the EOC mark (see below), the counter starts all over again at the next set.

This continues throughout the whole feeding sequence no matter how many insertions that are done.

Scanner

Counting is binary and the reading direction must be specified since the result differs.

Binary code 100 read from left to right equals 1 (one).

Same binary code read from right to left equals 4 (four).

Camera

Counter is decimal using complete character value.

Machine control functions

The machine control function tells the system how to handle each individual set of documents.

Beginning Of Collation (BOC)

This mark/character represents the start of a new set. The feeder will feed sheets until an end of set mark (EOS) is detected.

End Of Collation (EOC)

This mark/character represents the end of a set. The set will now be handled as programmed. For example folded and then inserted into an envelope.

Selective Feed 1 to 7 (SF1 to 7)

When this mark/character is detected, one or more selected enclosures will be added to the actual set. The next set will not have any enclosures added unless a new SFX mark is detected.

 **Note**

The SFX mark/character **must be present** on the first sheet of the new set.

Hand Feed Last (HFI)

Hand feed last means that the actual set shall have some material manually added on top of the set before it is inserted. When this mark/character is detected, the actual set will be paused on the infeed deck on the inserter. Infeed deck interlock will be disabled. Open the infeed deck cover, add material manually and press the pedal to complete the cycle.

 **Note**

The HFI mark/character **must be present** on the first sheet of the new set.

Hand Feed First (HFf)

Hand feed first means that the actual set shall have some material manually added at the bottom of the set before it is inserted. When this mark/character is detected, the system will be paused and the infeed deck interlock disabled. The operator can now open the infeed deck cover feed the material to the infeed deck. When the pedal is pressed, the system will complete its cycle.

 **Note**

The HFf mark/characters **must be present** on the first sheet of the new set.

DiVert Finished (DVF)

When this mark/character is detected, the actual set will be processed **without** having the envelope sealed. The next set will have the envelope sealed unless a new DVF mark is detected.

 **Note**

The DVF mark/character **must be** present on the first sheet of the new set.

DiVert to Deck (DVD)

When this mark/character is detected, the actual set will be transported to the outsort bin on the folder. The next set will be processed as programmed unless a new DVD mark is detected.

 **Note**

The DVD mark/characters **must be** present on the first sheet of the new set.

STop (ST)

When this mark/character is detected, the system will stop after the actual set has been processed.

 **Note**

The ST mark/character **must be** present on the first sheet of the new set.

Page Numbers (PN)

This is a counter that checks that certain defined characters on each sheet follows in the right order **within the set**. The counter increases or decreases by 1 (one) for every sheet fed. When $PN = PC$ (counting up) or $PN = 1$ (counting down) an EOC (see above) signal is generated. After EOC signal, the counter starts over again at the next set. PN works together with (requires) PC. The PN counter uses whole characters. Counting direction must be selected in Barcode settings.

Page Count (PC)

Defines the total number of sheets in the set. When $PC = PN$ (counting up) or $PN = 1$ (counting down) an EOC (see above) signal is generated. PC works together with (requires) PN.

The PN counter uses whole characters.

Job ID (JID) (only BCR 2D)

The Job ID field, which creates a consistent identifier for all sheets within the job ensuring the operator doesn't grab a stack from a job not yet meant to be mailed.

Job ID must not change during mail run (from start to stop).

Set Integrity (SI)

This is a set integrity check to verify that all sheets in a set carry the same SI value. For the next set, the value must be different. How is not important, see example below.

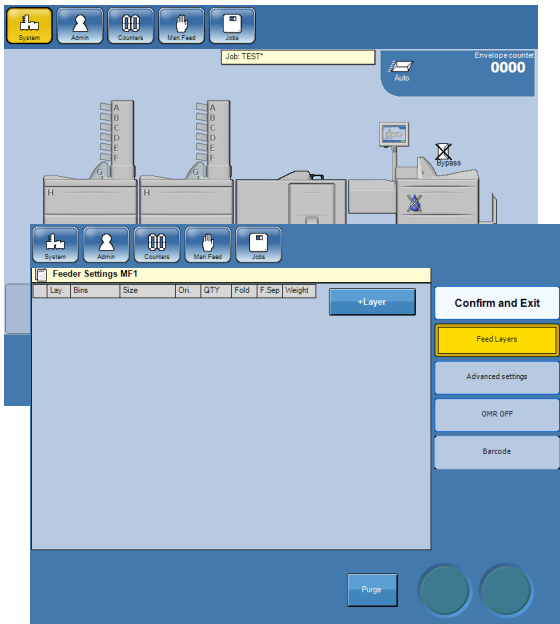
| Set | Sheet | SI value |
|-----|-------|----------|
| 1 | 1 | 111 |
| 1 | 2 | 111 |
| 1 | 3 | 111 |
| 2 | 4 | 000 |
| 3 | 5 | 100 |
| 3 | 6 | 100 |

Customer ID (CID) (only BCR 2D)

This is a set integrity check to verify that all sheets in a set carry the same customer id. When a new customer id is detected, that means that the previous sheet was the last one in that set and an EOC (end of collation) signal is generated, see example below.

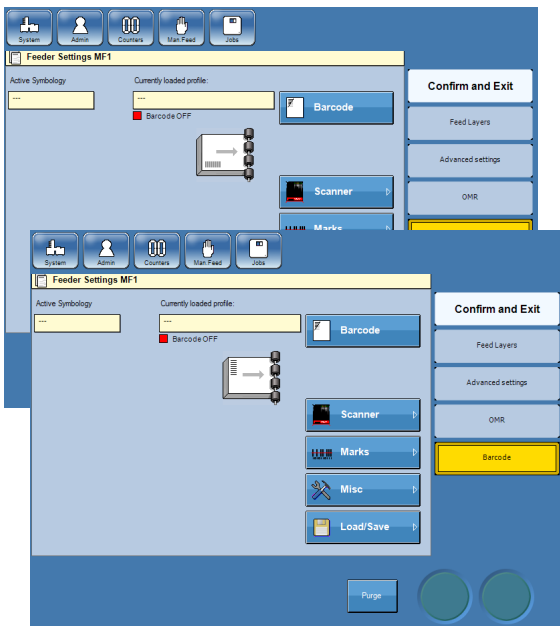
| Set | Sheet | Customer ID |
|-----|-------|-------------|
| 1 | 1 | 123 |
| 1 | 2 | 123 |
| 1 | 3 | 123 |
| 2 | 4 | 125 |
| 3 | 5 | 1001 |
| 4 | 6 | 1002 |

Creating an BCR profile



Check the specification of the Barcode for the job to determine function for each character/bit.

- 1 From the main screen, point at the feeder.
- 2 Point at the [Barcode] button.



- 3 **Scanner**
Define how the Barcode should be read, ladder or picket fence (see **9 Specifications** for explanation), by pressing the paper stack on the screen.

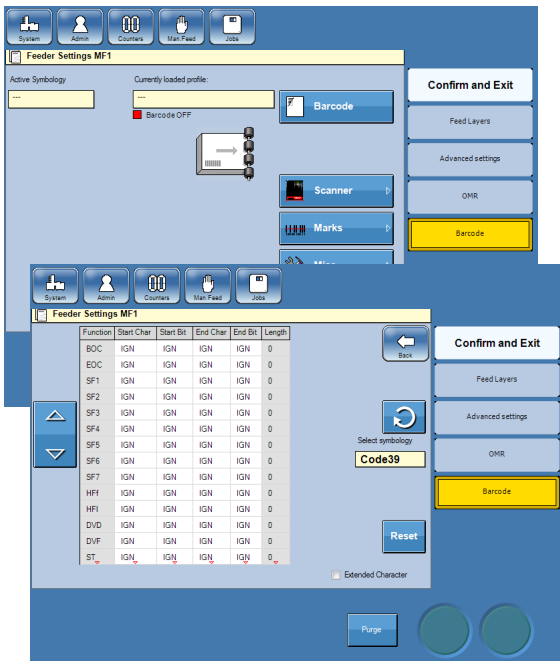
Camera

The camera can only be positioned in one direction.

Setting number of BCR marks

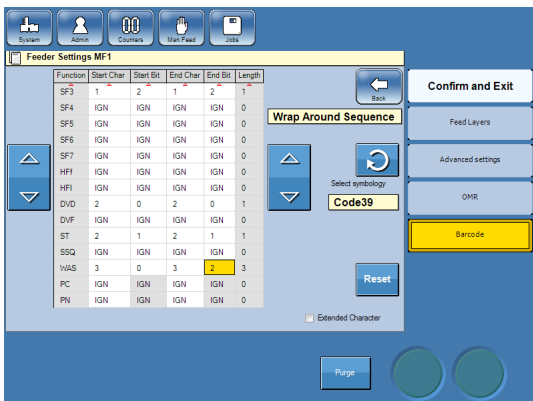
1 Point at the [Marks] button.

2 Choose symbology (code 39, I 2 of 5, code 128, Datamatrix or PDF417) by pressing loop arrow button.



4. Settings

Defining the BCR interpretation



Scanner

Define the position (character and bit) of each function used. Point at the first box next to the actual function and use the up arrow button to alter the start character. Point at the second box next to the actual function and use the up arrow button to alter the start bit. End character and end bit will automatically be altered to the same values and you can see the length in the rightmost box. If a function uses more than one bit, change stop character and stop bit to correct value as described above.

Camera

Define the position (character) of each function used. Point at the first box next to the actual function and use the up arrow button to alter the start character. End character will automatically be altered to the same values and you can see the length in the rightmost box. If a function uses more than one character, change stop character to correct value as described above.

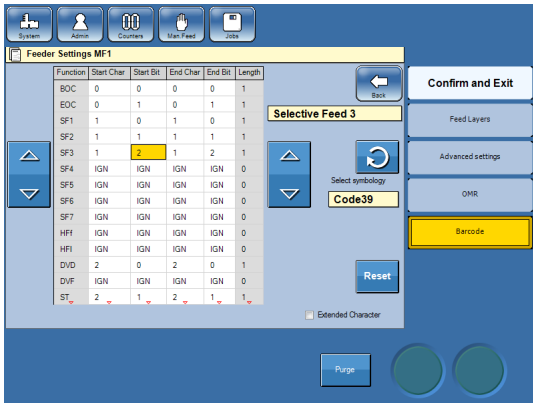
Note

The value of the end character and the end bit can be same or higher than the value of the start character and start bit.

As a result thereof, if you use the down arrow button to lower the start character and the start bit, the end character and the end bit will not be affected. If you also want to lower the value of the end character and the end bit you will have to do so by pointing at the actual value and use the down arrow button.

If you do not enter any value i.e. IGN is showed in all boxes, function is not enabled.

Defining the BCR interpretation, continued



The list below shows all available functions and in the order they appear.

- 1 BOC (Beginning of Collation)
- 2 EOC (End of Collation)
- 3 SF1 (Selective Feed 1)
- 4 SF2 (Selective Feed 2)
- 5 SF3 (Selective Feed 3)
- 6 SF4 (Selective Feed 4)
- 7 SF5 (Selective Feed 5)
- 8 SF6 (Selective Feed 6)
- 9 SF7 (Selective Feed 7)
- 10 HFF (Hand Feed First)
- 11 HFI (Hand Feed Last)
- 12 DVD (Divert to Deck)
- 13 DVF (Divert Finished)
- 14 ST (Stop)
- 15 SSQ (Set Sequence)
- 16 WAS (Wrap Around Sequence)
- 17 PN (Page Numbers)
- 18 PC (Page Count)
- 19 SI Set integrity
- 20 CID Customer ID
- 21 JID Job ID

WAS and/or SSQ counters

| 4 | 2 | 1 | Sum |
|---|---|---|-----|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 2 |
| 0 | 1 | 1 | 3 |
| 1 | 0 | 0 | 4 |
| 1 | 0 | 1 | 5 |
| 1 | 1 | 0 | 6 |
| 1 | 1 | 1 | 7 |

Binary count

| Inverted direction | WAS2 | WAS1 | WAS0 | Normal direction |
|--------------------|------|------|------|------------------|
| 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 1 | 1 |
| 2 | 0 | 1 | 0 | 2 |
| 6 | 0 | 1 | 1 | 3 |
| 1 | 1 | 0 | 0 | 4 |
| 5 | 1 | 0 | 1 | 5 |
| 3 | 1 | 1 | 0 | 6 |
| 7 | 1 | 1 | 1 | 7 |

Count, normal and inverted direction

If counters like WAS (Wrap Around Sequence) or SSQ (Set Sequence) are present in the code, min (begin) and max (end) value as well as direction must be set.

Scanner

Both the WAS and the SSQ counter are binary counters. The binary system only has two numbers 0 or 1 (for no mark or mark). First number (mark) represents the value 1, next the value 2, next value 4 and so on. The sum is normally calculated from right to left as in the Binary count figure to the left. A three digit binary code can therefore have eight different values from 0 to 7.

Looking at this count figure to the left (using the WAS counter as an example), the difference in value when counting from either direction is clearly shown. The same applies for the SSQ counter.

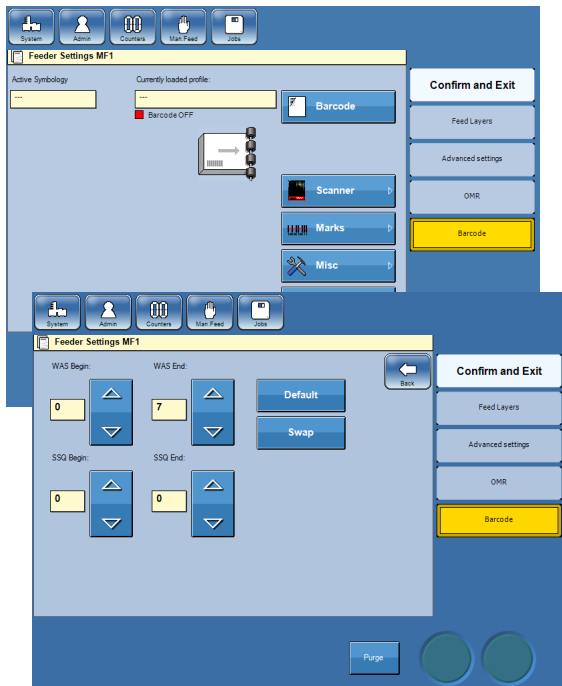
Camera

WAS and SSQ counting is decimal.

1 To set min (begin) and max (end) value and reading direction, press the [Misc] button.

2 Set min and max value by pressing the corresponding pointed arrow buttons. Min and max value can be set separately. Alter the reading direction by pressing the [Swap] button. Reading direction will be changed for both the WAS and the SSQ together.

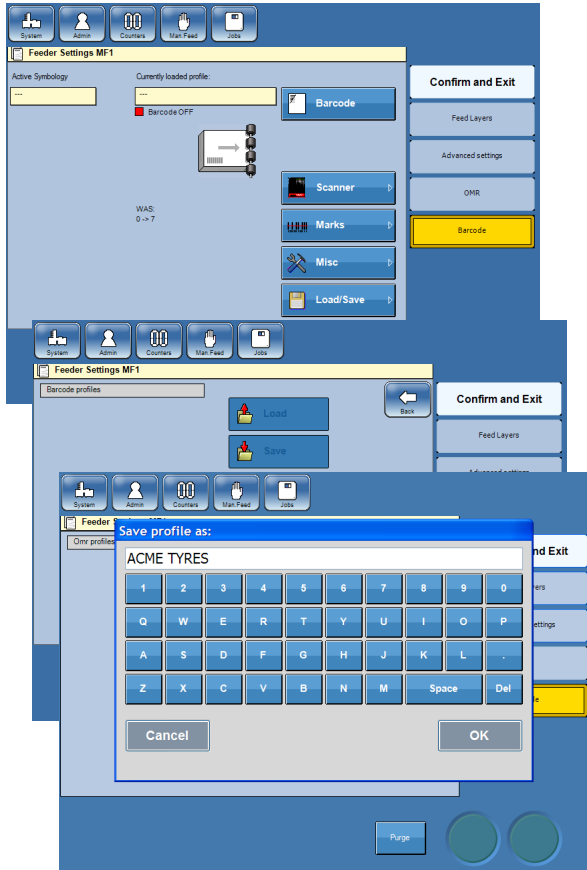
Press the [Back] button.



Saving BCR profiles

Note

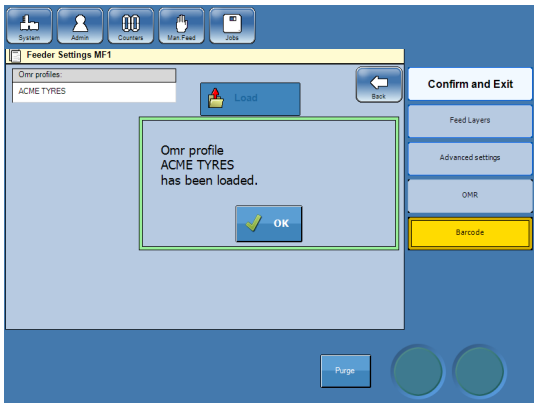
To be able to store settings you have to be logged in as an administrator, see section 1 **Basics**.



Saving BCR profiles work in the same manner as saving jobs. See storing, deleting and re-naming jobs in section 3. **Jobs**.

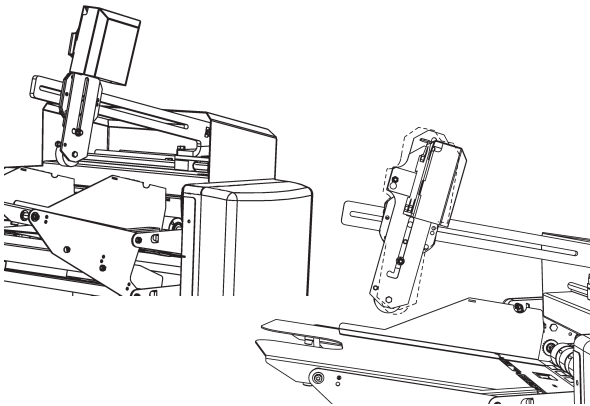
- 1** Save the BCR profile by pressing the [Load/Save] button.
- 2** Press the [Save] button.
- 3** Enter a name for the BCR profile and press the [OK] button.

Using an BCR profile



1 Create (see previously in this section) or load an existing BCR profile:

- Point at the feeder.
- Press the [BCR] button.
- Press the [Load/Save] button.
- Point at the BCR profile.
- Press the [Load] button.
- Confirm by pressing the [OK] button.

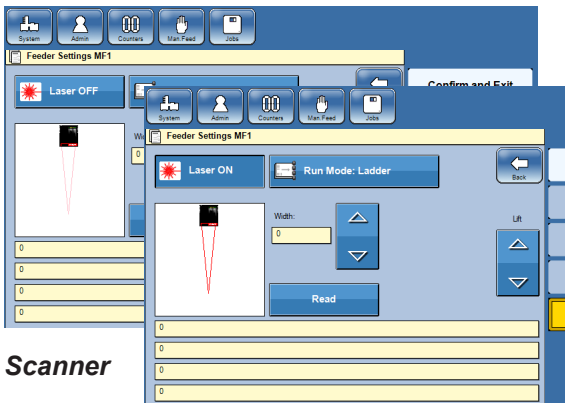


2 Scanner

Make sure that the scanner is physically positioned correctly (fence/ladder) to read the BCR marks, see **1 Basics, Positioning the scanner**.

Camera

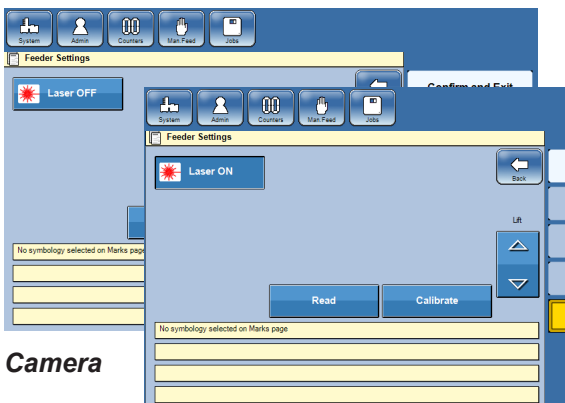
The camera can only be positioned in one direction.



Scanner

3 Turn on the laser by pressing the [Scanner] button and then press the [Laser] so it goes from “OFF” to “ON”.

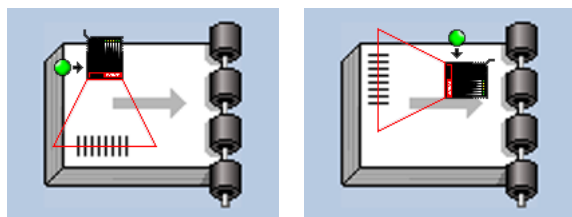
Procedure is the same, but depending on whether you have a Scanner or a Camera installed, the user interface looks different.



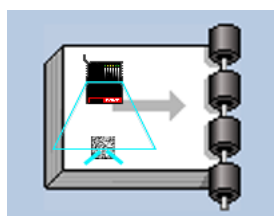
Camera

Continued on next page.

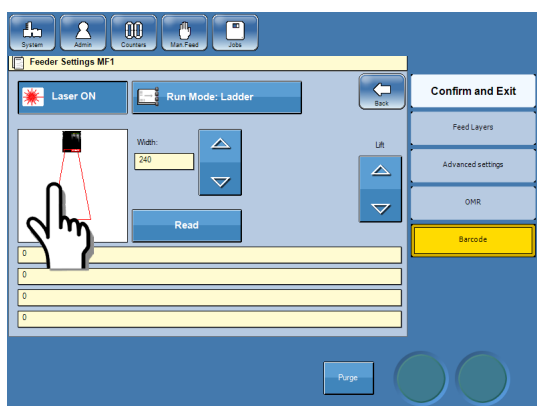
Using an BCR profile, continued



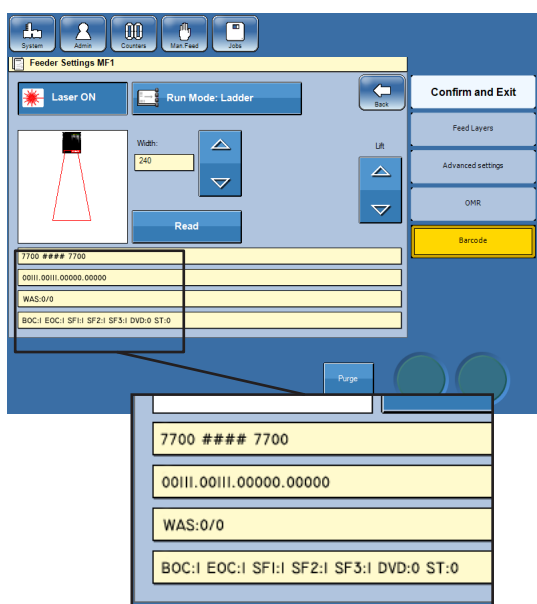
- 4 Scanner**
Position the laser beam in the middle of the BCR code.



- Camera**
Position the beam so that the point where the lines would have intersected is in the centre of the code.



- 5 Scanner only**
Adjust the laser beam width so that it is approximately 10-15 mm (0.4-0.6") wider than the BCR code on both sides. Either by pressing the pointed arrows or by just pointing at the beam and drag.



- 6** Press the [Laser ON] button and then the [Read] button. The four yellow fields will now display information about the BCR code.

First field: Will show the values of the characters.

Second field: Will show the binary representation of the character values.

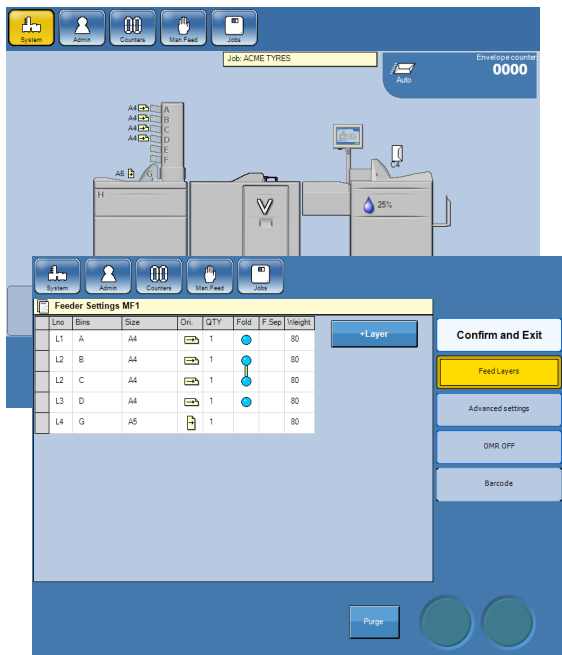
Third field: WAS and/or SSQ counters, if used, are displayed here. Also the value of the character is displayed.

Fourth field: Displays the remaining functions and their values.

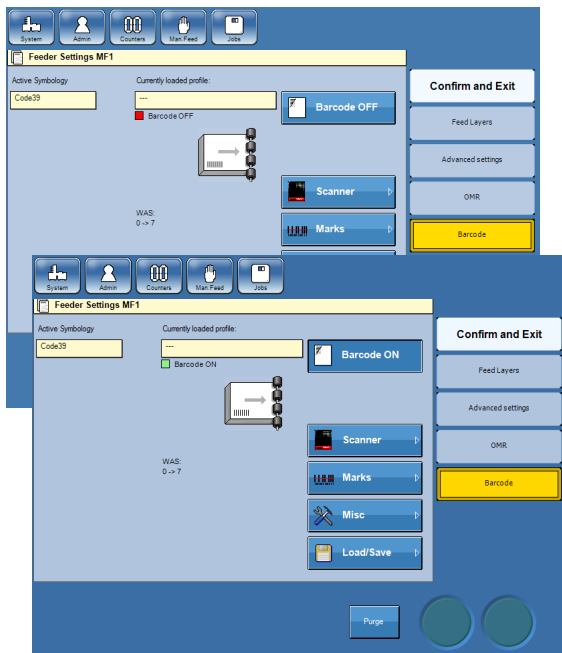
BCR after power off/power on

After the system has been powered off and then powered on, all job and BCR settings will remain but the scanner is switched off.

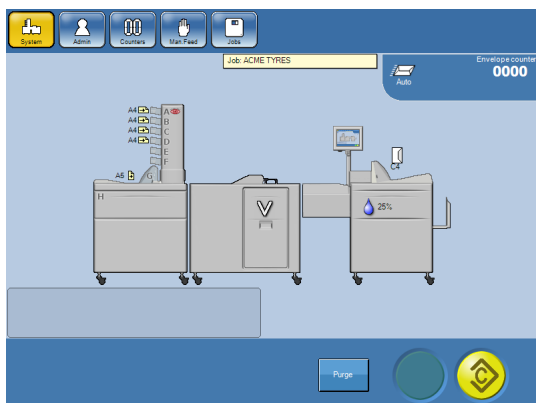
1 To switch the scanner on, point at the feeder and then press the [Barcode] button.



2 Switch the scanner from OFF to ON by pressing the [Barcode OFF] button.



3 System is now ready.



5. Admin

The Admin Screen

In the Admin screen you will find additional features and settings. Logged in as an administrator you will also be able to create and delete custom envelopes and inserts.

Note

Certain customer configurations will automatically be logged in to Admin at power on. If so, skip this section.



- 1 From the Main screen, press the [Admin] button.

Size Standard

In the Admin screen you can change the paper and envelope size standard. By changing the size standard the preset paper and envelope sizes are altered to best fit your regional standard.

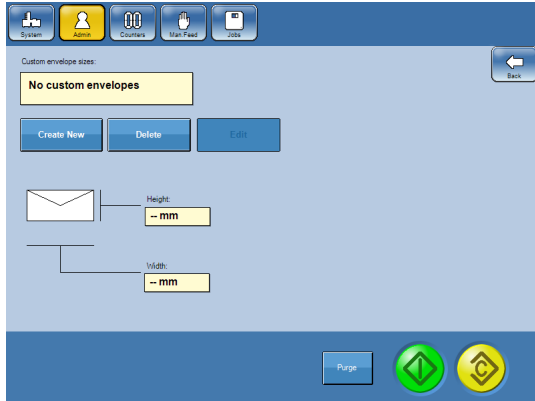


- 1 In the Admin screen, press the loop arrow button to select the correct regional standard.

Custom envelopes

Note

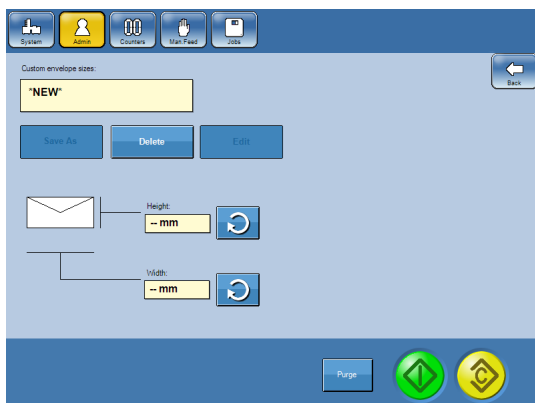
To be able to create and delete custom envelopes you must be logged in as an administrator, see section 1 Basics.



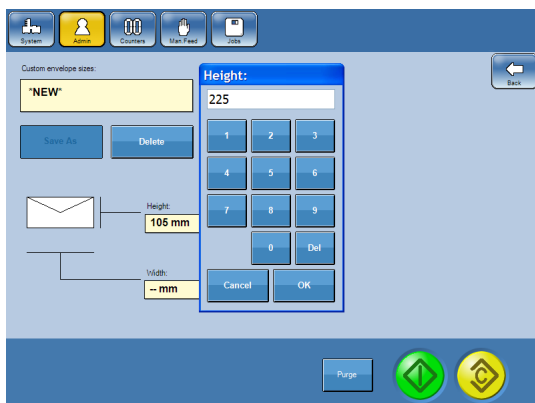
- 1 In the Admin screen, press the [Custom envelopes] button.

Creating custom envelopes

- 1 In the Custom envelopes screen, press the [Create new] button to create a new custom envelope or [Edit] to edit an already existing custom sized envelope. The button now changes to a greyed out [Save as] button.



- 2 Press the loop arrow button next to the heading "Height". Enter the height and press the [OK] button. Continue with entering the width in the same manner.

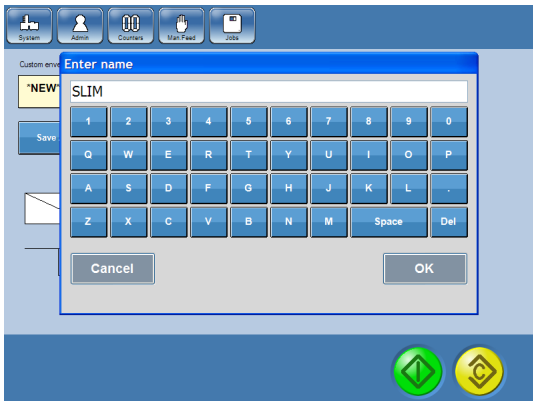


- 3 Press the [Save As] button.



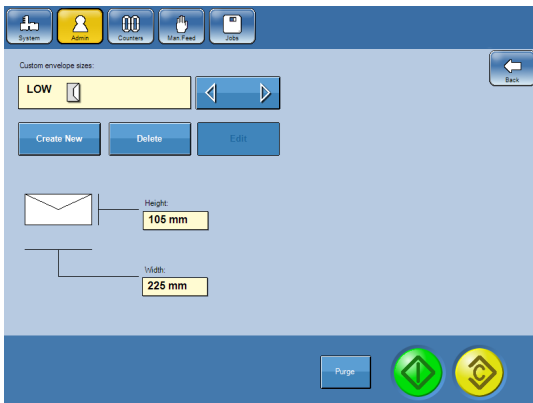
Continued on next page.

Creating custom envelopes, continued

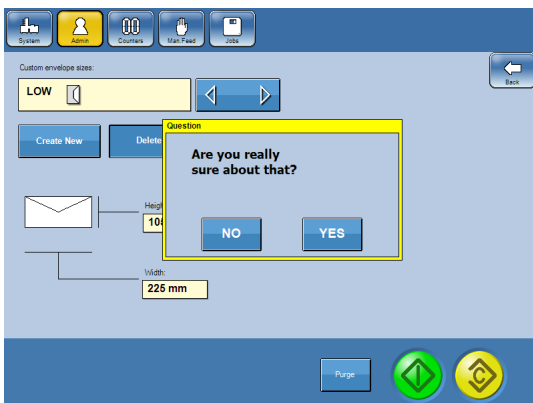


- 4 Enter a name and press the [OK] button.

Deleting custom envelopes



- 1 In the Custom envelopes screen, select the custom envelope size you want to delete and press the [Delete] button.

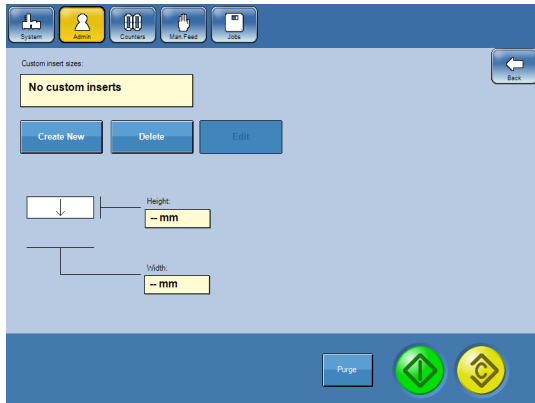


- 2 Confirm by pressing the [Yes] button.

Custom inserts

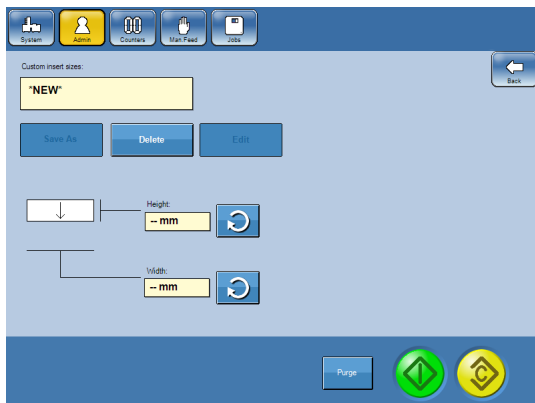
Note

To be able to create and delete custom inserts you must be logged in as an administrator, see section 1 Basics.

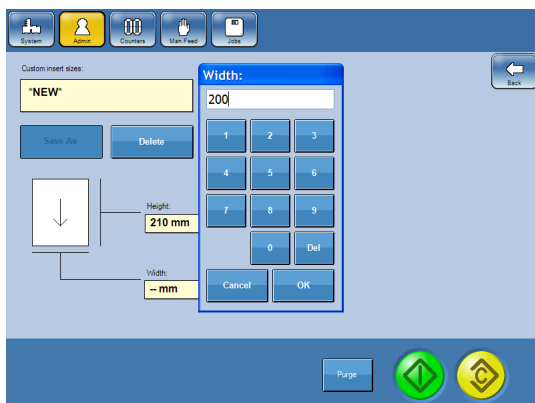


- 1 In the Admin screen, press the [Custom inserts] button.

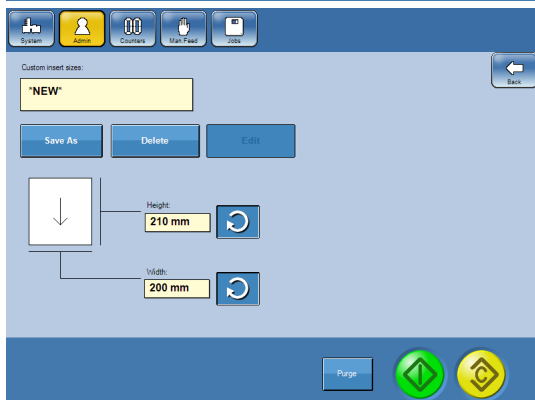
Creating custom inserts



- 1 In the Custom inserts screen, press the [Create new] button to create a new custom insert or [Edit] to edit an already existing custom sized insert. The button now changes to a greyed out [Save as] button.



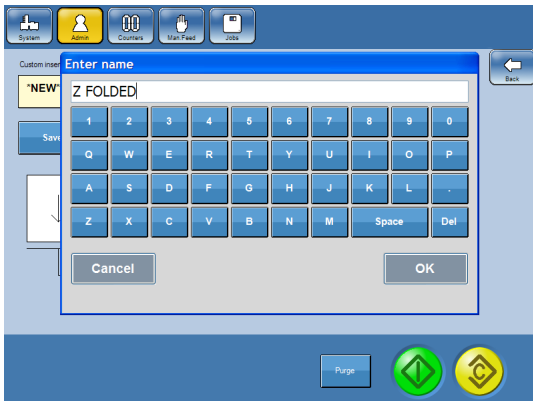
- 2 Press the loop arrow button next to the heading "Height". Enter the height and press the [OK] button. Continue with entering the width in the same manner.



- 3 Press the [Save As] button.

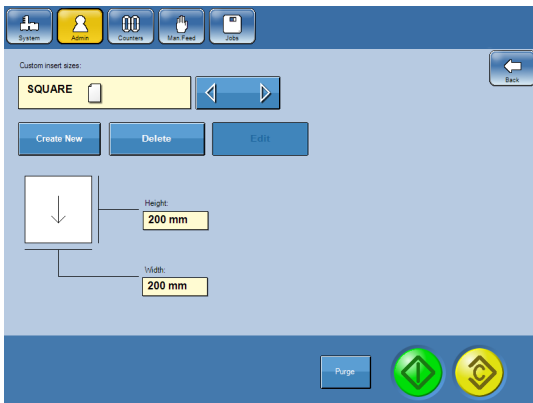
Continued on next page.

Creating custom inserts, continued

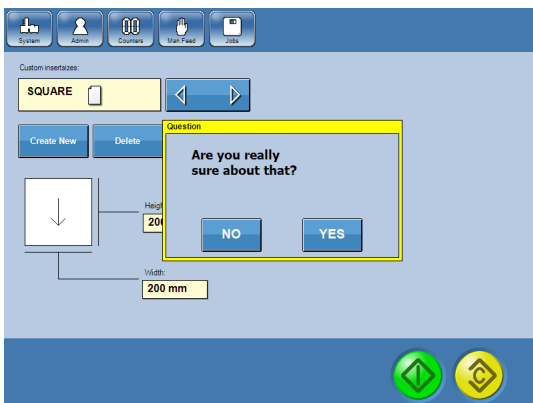


- 4 Enter a name and press the [OK] button.

Deleting custom inserts




- 1 In the Custom inserts screen, select the custom insert size you want to delete and press the [Delete] button.



- 2 Confirm by pressing the [Yes] button.

Clean Sealing Module

The fresh fluid container has to be filled if it is the first time to run the system and when the machine indicates Refill fluid 



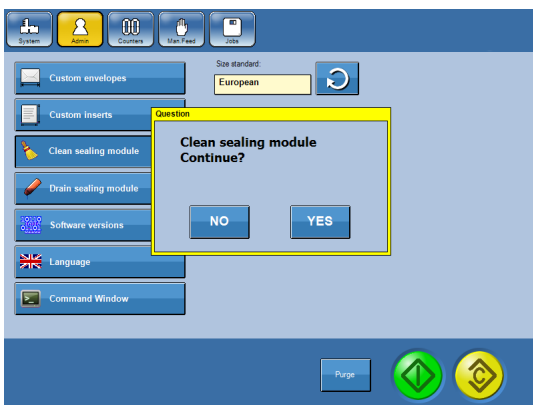
- 1 Fill the fresh fluid container with sealing fluid.
- 2 From the Main screen, press the [Admin] button and then press the [Clean sealing module] button.

 **Note**

Make sure the waste fluid container is not full before running the cleaning program. Cleaning will drain up to 20 cl (7 fl oz).

Confirm cleaning the sealing module by pressing the [Yes] button.

- 3 Wait until the cleaning process is finished (message disappears).
- 4 Remove and drain the waste fluid container.



5. Admin

Drain Sealing Module

If the system has to be emptied from sealing fluid, for example before moving the Inserter, follow instructions below.



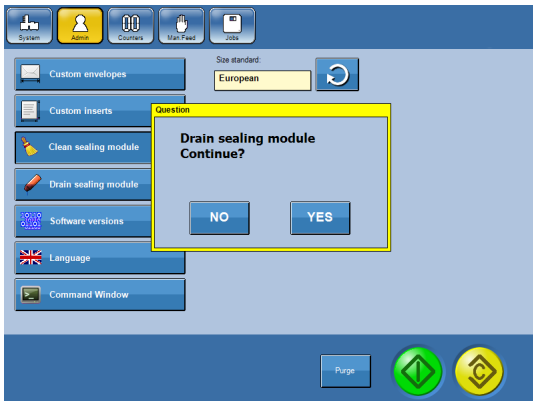
- 1 From the Main screen, press the [Admin] button and then press the [Drain sealing module] button.

 **Note**

Make sure the waste fluid container is not full before running the cleaning program. Emptying will drain up to 20 cl (7 fl oz).

Continued on next page.

Drain Sealing Module, continued



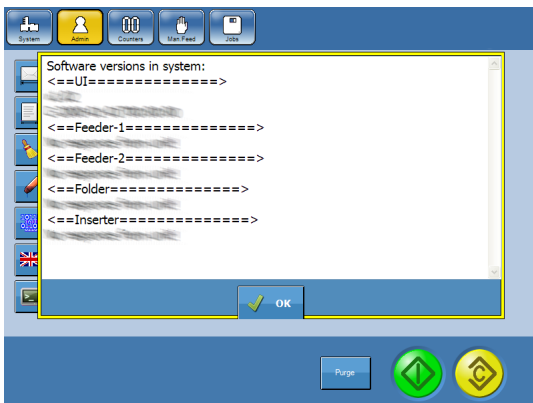
- 2 Confirm draining the sealing module by pressing the [Yes] button.

Wait until the draining process is finished (message disappears).

- 3 Remove and drain the both fluid containers.

Software versions

This window displays software versions for user interface (UI) i.e. the screen you are watching and all modules included in the system.



- 1 From the Main screen, press the [Admin] button and then press the [Software versions] button.

- 2 Close the window by pressing the [OK] button.

Language



- 1 From the Main screen, press the [Admin] button and then press the [Language] button.

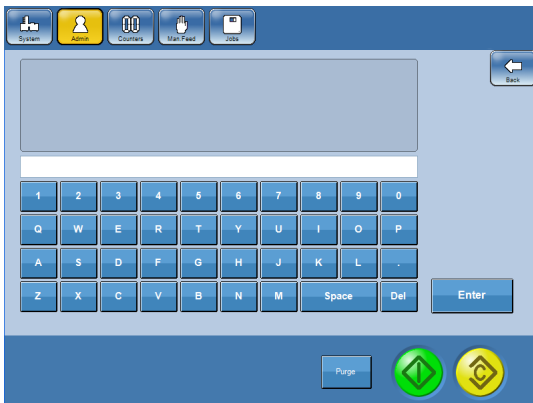
- 2 Select language with the loop arrow and press the [✓] button to accept.

Command window

The command window allows you to execute commands in the system. In order to create custom sized envelopes and inserts, to save jobs and OMR / BCR profiles you need to be logged in as an administrator. Example below shows how to log in, but the principle is the same for other commands.



1 From the Main screen, press the [Admin] button and then press the [Command window] button.



2 Enter the command “ADMIN.” followed by the access code using the buttons. Press [OK] to log in.

5. Admin

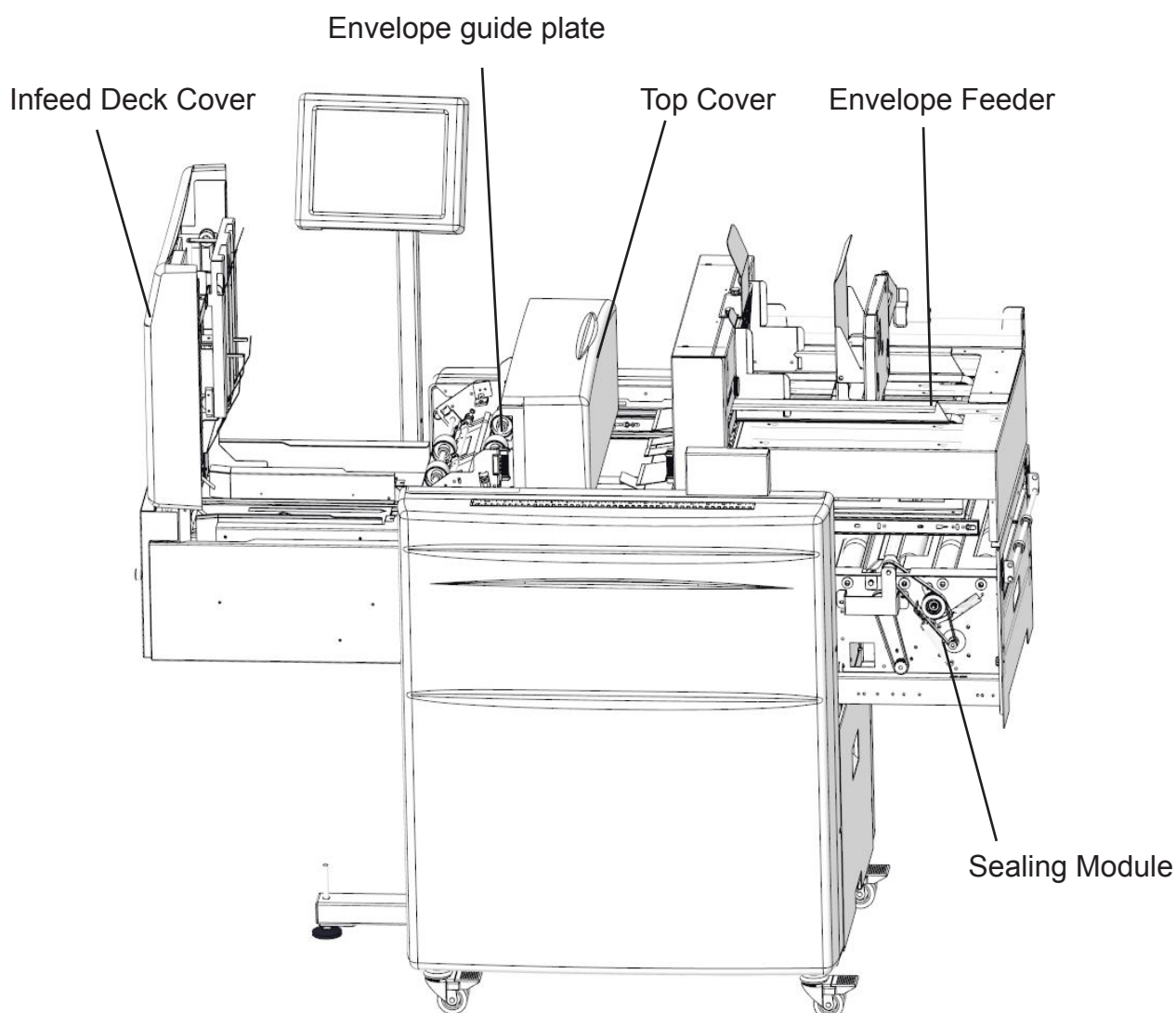
Note

- The default access code is “1000”. Correct command is “ADMIN.1000”.
- To change the access code contact your service technician.
- To log out, enter the command “ADMIN.” followed by anything but the correct access code.
- You will automatically be logged out when the Inserter is powered off.

6. Clearing a Paper Jam

Inserter

Following covers/modules can be opened in order to clear a paper/envelope jam:



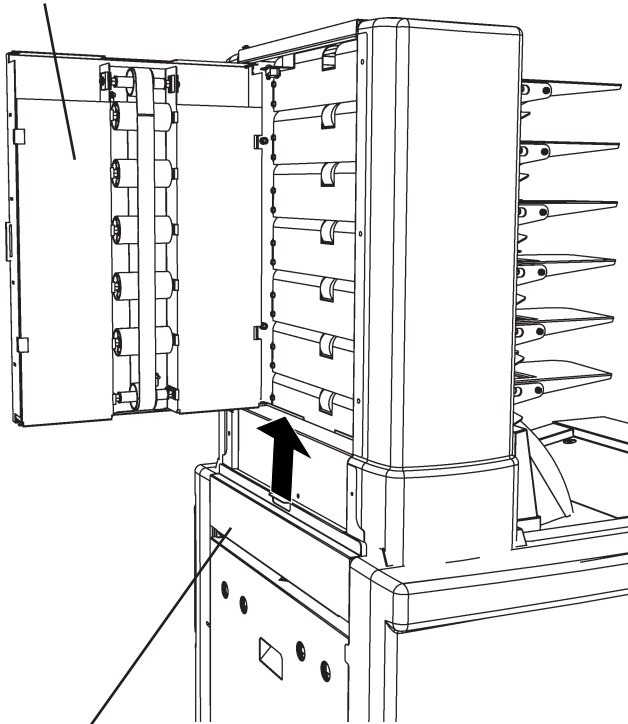
 **Note**

To be able to open the Top Cover, first slide the Envelope Feeder open.

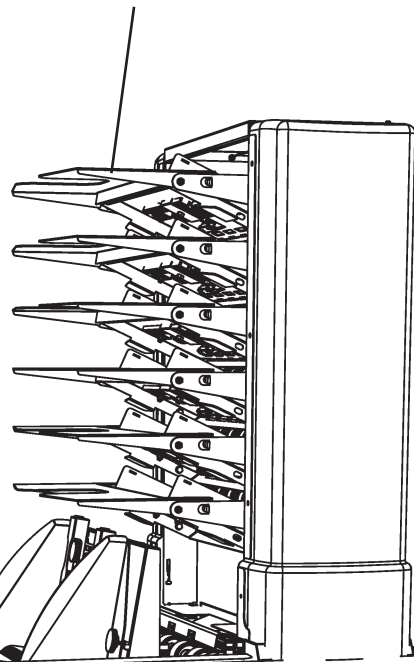
Mailfeeder

Following covers/modules can be opened in order to clear a paper jam:

Towerfeeder door



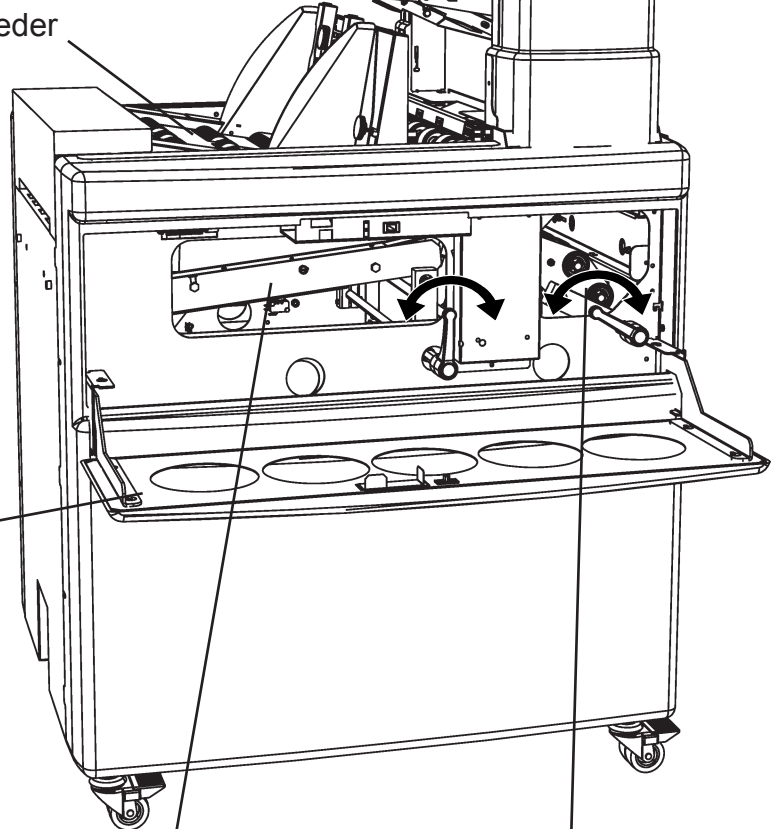
Bin extension plate
(lift off for better access)



6. Clearing a Paper Jam

Outfeed hatch
(lift to remove)

Bookletfeeder



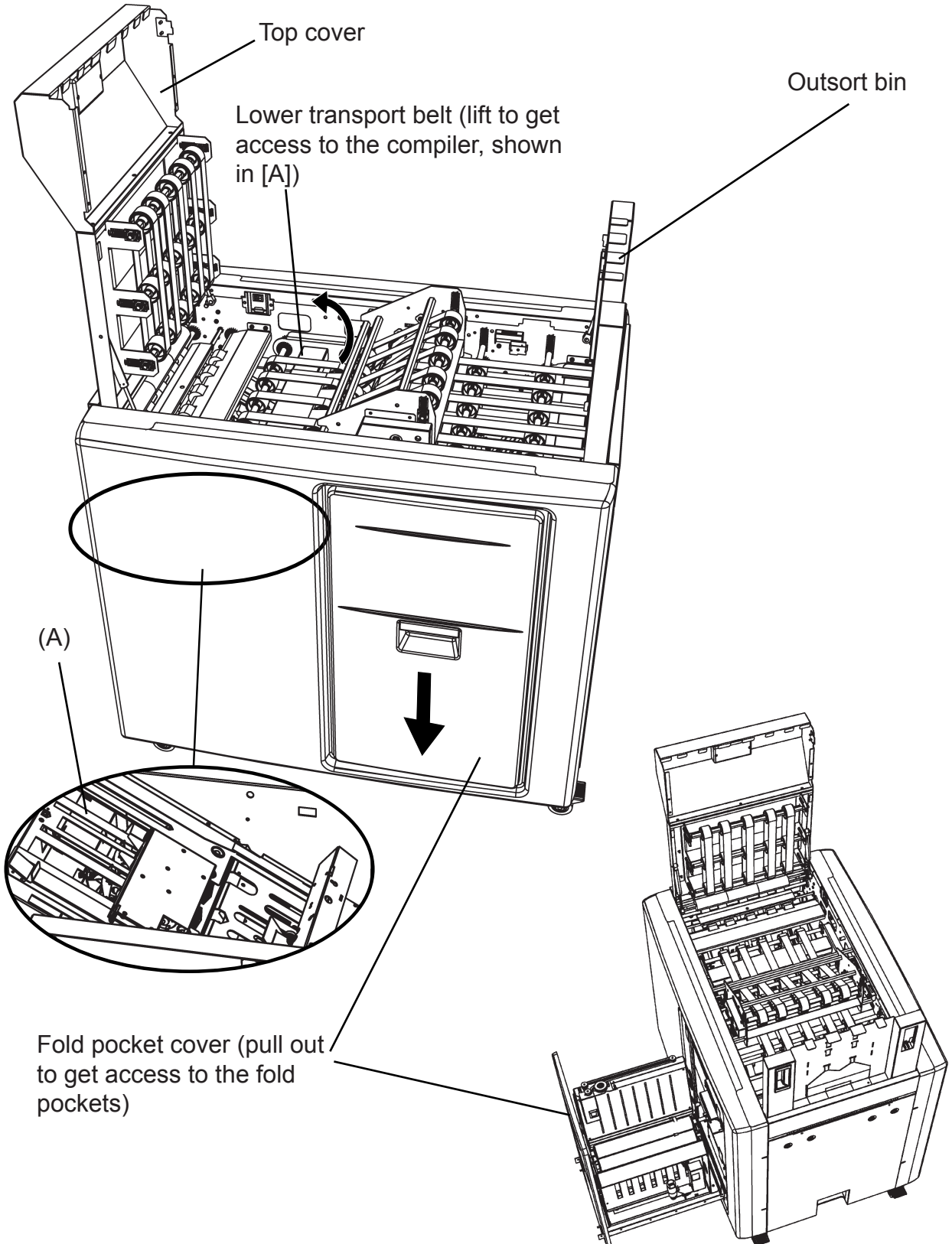
Hatch

Accumulator
(Lift up/lower by turning
lever)

Paper transport
(Lift up/lower by turning
lever)

Folder

Following covers/modules can be opened in order to clear a paper jam:



Page intentionally blank

7. Troubleshooting

General

If an error such as a paper jam condition should occur, it is indicated on the Inserter display. Which unit in the system and the nature of the fault is generally displayed in text or as a fault code at the bottom of the display.

In the occasion of Malfunctions do the following: Restart and Reload job. If error consist call service engineer.

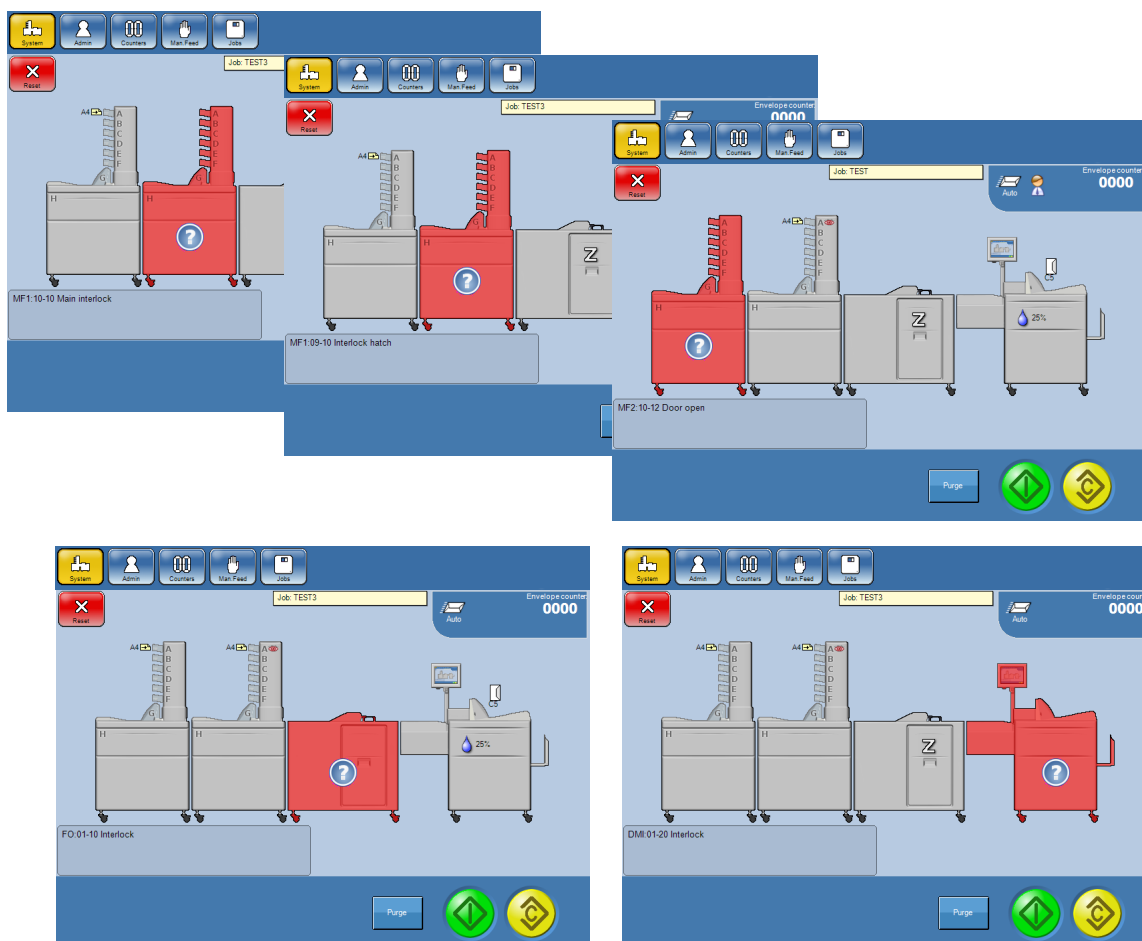
Note

If the problem cannot be solved with the instructions in this section or the Tips and Tricks under section **2 Running the system**, contact an authorized technician.

Notices

Interlock

These notices will be shown if one of the covers is open. Text on the screen indicate the open covers.



Continued on next page.

Notices, continued

DMI:06-22 Remove set from stacker

The most recent envelope may not be correct. Check the top envelope in the stacker. Press the [Reset] button to exit message.

DMI:06-15 Stacker full

The stacker is full and has to be emptied. Press the [Reset] button to exit message.

Note

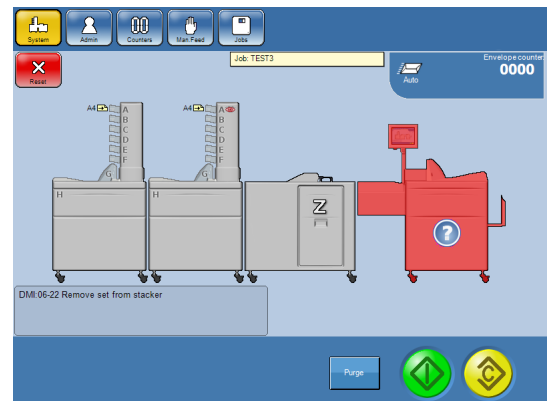
If using a BST and problem occurs, contact an authorized technician.

DMI:01-14 Envelope low level

Load more envelopes. Press the [Reset] button to exit message.

DMI:07-16 Check water level

Check fluid level and fill fluid as described in Fill/Refill Fluid under section 1 Basics. Press the [Reset] button to exit message.



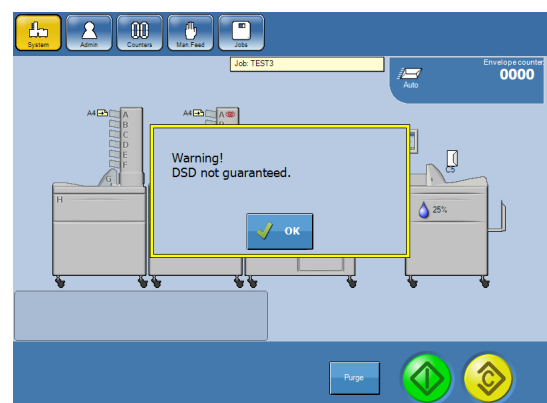
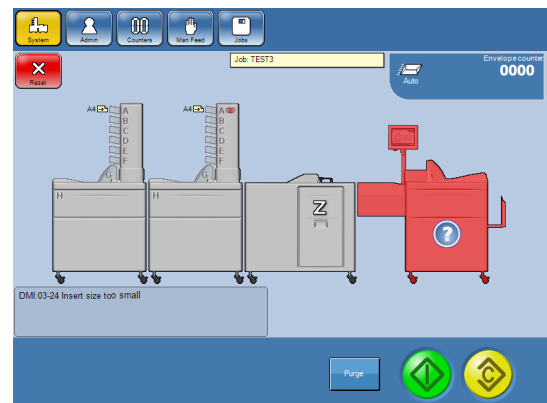
Warnings

DMI:03-24 Insert size too small

The insert size is below the recommended size compared to the envelope. This may affect operation in a negative way. Press the [Reset] button to exit message.

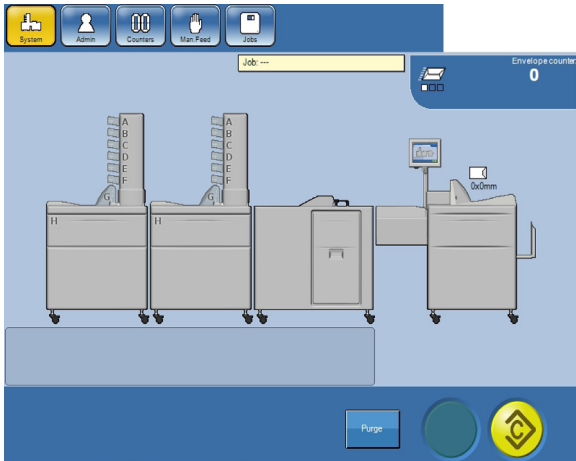
DSD not guaranteed

If an extremely light absorbing and/or thick paper is used, the double sheet detection function is limited and identification of doubles are not guaranteed. Contact an authorized technician if the problem persists when not using light absorbing and/or thick paper.

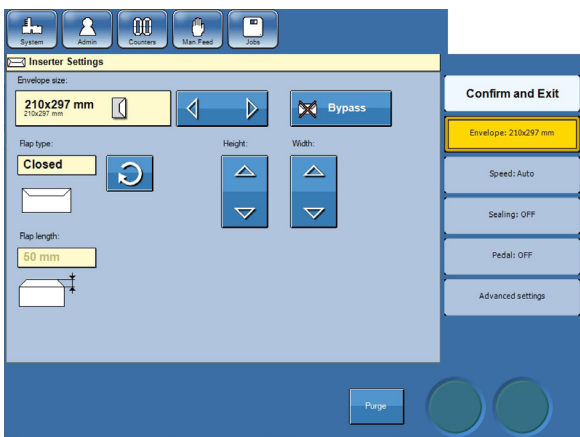


Envelope Feed Skew

- Envelopes arriving at the Envelope Opener Tools can be caused by a few things, To diagnose what might cause this issue, always start with looking at the feeder and how envelopes are loaded. Certain issues can be resolved in customer mode, to access the this adjustment point, please follow below process:



1 From the Main screen, select Inserter Module.



2 Select the [Advanced] button.



3 Select the [Arrow] button next to the Skew Delay window.

Envelope Feed Skew, continued



- 4 Enter adjustments based on examples in Detailed Feeder Set-up then select the [OK] button.

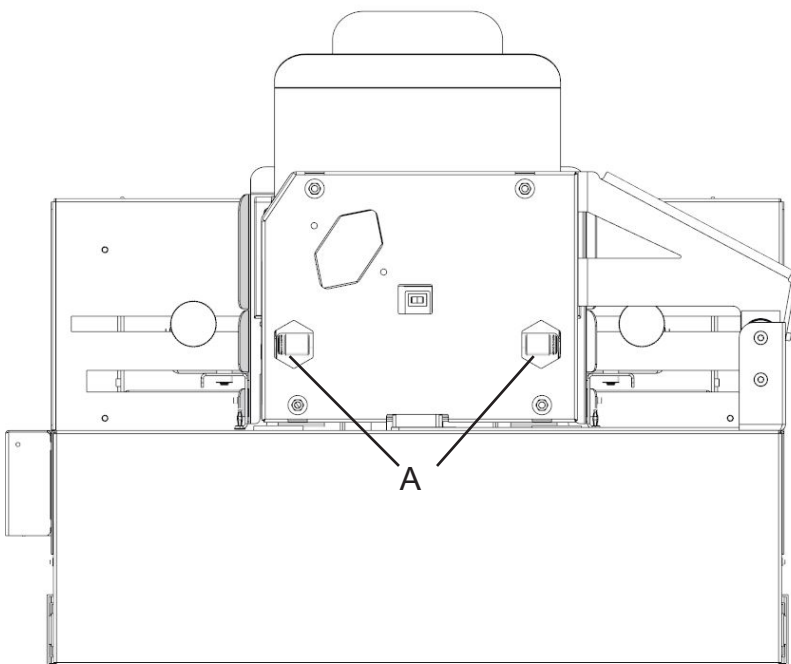
Detailed Envelope Feeder Set-up

In this section you will find recommendations on how to set up the Envelope Feeder for different types of Envelopes. For Envelopes that asks for the “Ring the Bell” set up, please refer to procedure below.

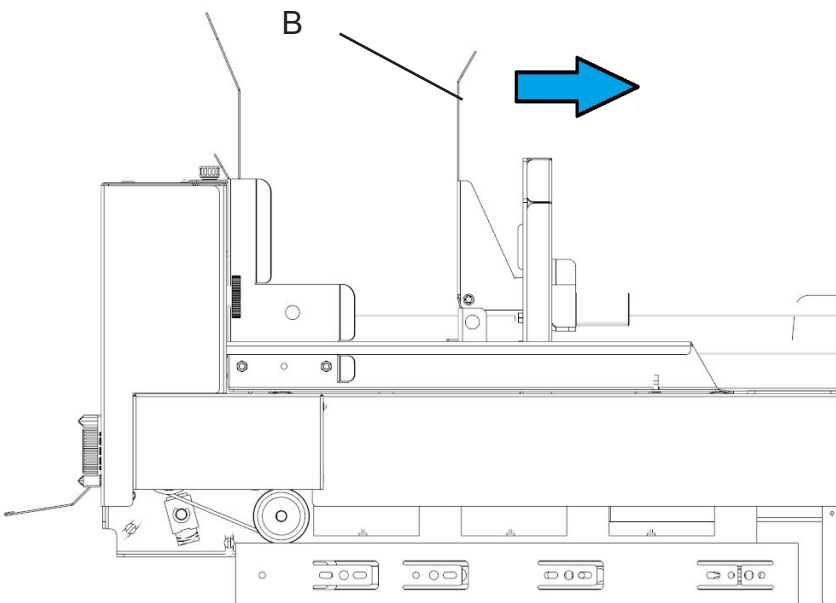
 **Note**

For detailed description of Envelope Feeder parts refer to the **Guide to Components** section.

Ring the Bell



- 1** At the back of the Envelope Feeder, ensure that the locking screws [A] are loosened.



- 2** Gently push the Back Wall [B] back as far as it goes and tighten down the locking screws [A].

Continued on next page.

Detailed Envelope Feeder Set-up, continued

#10 & C6/5 Non-Window/Single Window style envelopes

Adjust to Envelope width + 0.5 mm each side

Front wall at Middle Position

Back wall: Spring Loaded

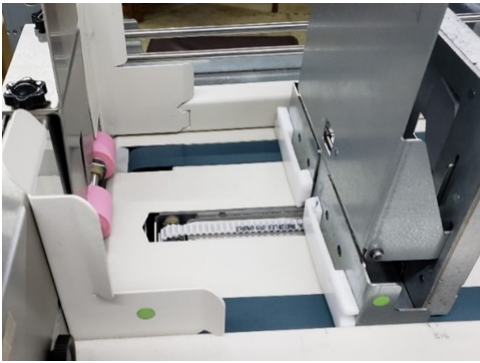
(2) Spacer Blocks at bottom of the back wall

Skew Delay: 20 ms

Loading: "Ring the Bell"

Special Cases:

Generally run very well. May need to reduce skew delay if LE damage is seen (Start with 5 ms and evaluate if more is needed)



Nominal Setting

Normal stacking of envelopes

#10 & C6/5 Dual Window/Large Window style envelopes

Adjust to Envelope width + 0.5 mm each side

Front wall at Extended Position

Back wall: Spring Loaded

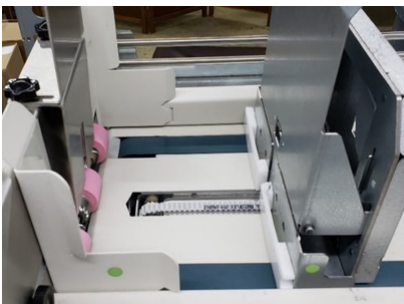
(2) Spacer Blocks at bottom of the back wall

Skew Delay: 3 ms

Loading: "Ring the Bell"

Special Cases:

Many of these require very low skew delays, 3ms or lower to reduce appearance of creases in the window.



Front Wall Extended

Dual or Large window Stacking

Detailed Envelope Feeder Set-up, continued

6 X 9, 6X9.5 & C5 Non-Window / Windowed style envelopes

Adjust to Envelope width + 0.5 mm each side

Front wall at Middle Position

Back wall: Spring Loaded

(2) Spacer Blocks at bottom of the back wall

Skew Delay: 20 ms

Loading: "Ring the Bell"

Special Cases:

Run very well with the "standard" settings. However, C5 material (thin, weak) envelope can display LE damage. Lower skew correction.



Nominal Settings



Half fold Letter stacking

6 X 9, 6X9.5 & C5 Non-Window / Windowed style envelopes

Adjust to Envelope width + 0.5 mm each side

Front wall at Middle Position

Back wall: Leaning back 10mm

(2) Spacer Blocks at bottom of the back wall

Skew Delay: 20 ms

Loading: Slight angle to back wall

Special Cases:

Stack too heavy, collapsing backwall: adjustment to the backwall to limit its angle toward the rear of the feeder. C4 needed to lean 10mm (black spacer at backwall)



Nominal Settings for Flats



Flat Landscape envelop stacking

Detailed Envelope Feeder Set-up, continued

C4, 9 X 12 & 10 X 13 Catalog Non-Window / Windowed style envelopes

Adjust to Envelope width + 0.5 mm each side

Front wall at Middle Position

Back wall: Positioned at vertical

(2) Spacer Blocks at bottom of the back wall

Skew Delay: 20 ms

Loading: Vertical back wall

Special Cases:

All of these applications required the backwall to be fixed in its vertical position.



| | | |
|------------------------------------------------|------------------------|------------------------------|
| Vertical back wall required for portrait Flats | Vertical stack (front) | Back shows adjustable spacer |
|------------------------------------------------|------------------------|------------------------------|

Problematic envelopes for feeding

Badly curled or twisted: Position Spacer to drive the trailing edge further; even at front

One Corner not at front wall: Double up spacer at trailing corner.

Large Window one side: Position both spacers opposite side of large window.

Special Cases:

Twist (corner to corner), curl (any edge) or warped material beyond 6.4 mm is out of spec. The adjustments above help with material up to 10 mm out of spec



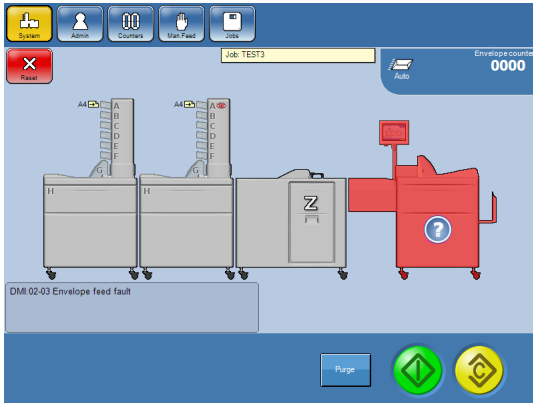
| |
|-----------------------------------------------------------------------------------------------------------|
| Curled or Twisted - Drive the bottom corner (double spacers or remove s pacer from leading corner) |
|-----------------------------------------------------------------------------------------------------------|



| |
|------------------------------------------------------|
| Double / offset spacers opposite large window |
|------------------------------------------------------|

Fault Codes

Inserter Fault Codes



All Inserter fault codes listed below are presented as shown in the figure. The error code is the only thing that differs.

DMI:0203 Envelope feed fault

Envelope jam. Slide the Envelope Feeder open and open the top cover. Remove the envelope. Press the [Reset] button to exit message.

Make sure correct envelope size is set according to section **4 Settings**.

- Make sure the correct envelope type is set according to section **4 Settings**. If type open is chosen when a closed envelope is used, this fault will occur.
- Check that the envelope flaps are not folded around other envelopes in the stack.

DMI:0404 Flap opening miss

Opening of the envelope flap has failed.

Slide the Envelope Feeder open and remove. Press the [Reset] button to exit message.

- Check that the envelopes are loaded correctly as described in Load Envelopes in DMI under section **1 Basics**.
- Make sure correct envelope type, open or closed flap, is selected according to section **4 Settings**.

DMI:0406 Envelope opening miss

Opening of the envelope has failed. Slide the Envelope Feeder open and remove the envelope. Press the [Reset] button to exit message.

Check that the envelopes are loaded correctly as described in Load Envelopes in DMI under section **1 Basics**.

- Adjust side guides. If side guides are set too loose, the envelope will not be fed straight and it could cause envelope opening miss.
- Adjust separation pressure. If the separation pressure is set unevenly the envelope will not be fed straight and it could cause envelope opening miss.
- Change insert size according to Tips and Tricks under section **2 Running the system**.
- To prevent this fault the envelope stop position can be adjusted as described in Advanced Settings under section **4 Settings**.
- If the problem persists it can be caused by too soft or not properly glued envelopes. For more information on envelope requirements see section **9 Specifications**.

Continued on next page.

Insertter Fault Codes, continued

DMI:0107 Envelope misfeed

Envelope could not be fed from the Envelope Feeder. Press the [Reset] button to exit message.

- If the envelope stack is low the extra weight can be used to prevent envelope misfeeds.
- Make sure correct envelope size is set according to section **4 Settings**.
- Adjust side guides and make sure they are not set too tight.
- Check/clean the envelope feed rollers according to Maintaining Your Machine under section **8 General Remarks**.

DMI:0508 Envelope stuck at roller

Envelope jam. Slide the Envelope Feeder open and remove the envelope. Press the [Reset] button to exit message.

- Clean the paper path according to Maintaining Your Machine under section **8 General Remarks**.
- Contact an authorized technician if the problem persists.

DMI:0609 Sealing miss

Sealing has failed. Remove the unsealed envelope from the stacker. Press the [Reset] button to exit message.

- Check that the paper path is clean, glue build-up can result in sealing miss. See Maintaining Your Machine - Cleaning Sealing Module under section **8 General Remarks**.
- Run the cleaning Sealing Module program, see Maintaining Your Machine - Cleaning Sealing Module under section **8 General Remarks**.
- Adjust the amount of sealing fluid according to Insertter Settings under section **4 Settings**.
- Decrease speed according to Insertter Settings under section **4 Settings**.
- Increase sealing delay according to Insertter Settings under section **4 Settings**.
- Increase insert offset according to Insertter Settings under section **4 Settings**.

DMI:0310 Pusher belt stuck

Paper and/or envelope jam on infeed deck or inside the Insertter.

- Open the infeed deck cover and slide the Envelope Feeder open and remove the insert set and envelope. Press the [Reset] button to exit message.
- Contact an authorized technician if the problem persists.

Continued on next page.

Insertion Fault Codes, continued

DMI:0311 Insertion miss

Insertion has failed. Open the infeed deck cover and slide the Envelope Feeder open and remove the insert set and envelope. Press the [Reset] button to exit message.

- To prevent this fault the envelope stop position can be adjusted as described in Stop Position in **4 Settings**..
- If feeding reply envelopes from the Bookletfeeder, make sure to load the reply envelopes flap side down.
- Contact an authorized technician if the problem persists.

DMI:0312 Insert fault

Insertion has failed.

- Open the infeed deck cover and slide Envelope Feeder open and remove the insert set and envelope. Press the [Reset] button to exit message.
- Contact an authorized technician if the problem persists.

DMI:0113 Size mismatch

This screen will be shown when running trial piece if the insert size, set in the Mailfeeder settings exceeds the envelope size, set in the Inserter settings. Press the [Reset] button to exit message.

- Check that the Inserter and Mailfeeder settings are correct.
- Make sure correct paper orientation, landscape/portrait is chosen.
- Make sure there is enough clearance in the envelope for the thickness of the inserts as described in Filling Capacity under section **1 Basics**.

DMI:0317 Two sets on infeed deck

This screen is shown during operation if two insert sets are fed onto the infeed deck.

- Open the infeed deck cover and remove the sets.
- Press the [Reset] button to exit message.

DMI:0318 Remove set from infeed deck

This screen is shown at start up if there is paper on the infeed deck.

- Open the infeed deck cover and remove the insert set.
- Press the [Reset] button to exit message.

DMI:0219 Remove envelope inside hood

This screen is shown at start up if there is an envelope jam under the top cover.

- Slide the Envelope Feeder open and open the top cover.
- Remove the envelope.
- Press the [Reset] button to exit message.

Continued on next page.

Inserter Fault Codes, continued

DMI:0323 Check infeed stopper

The infeed stoppers have not stopped the paper at right position on the infeed deck.

- Open infeed deck cover and remove the insert set.
- Press the [Reset] button to exit message.
- Contact an authorized technician if the problem persists.

DMI:0525 Envelope lost

The envelope was placed on the sealing beam instead of being registered by the sealing sensor.

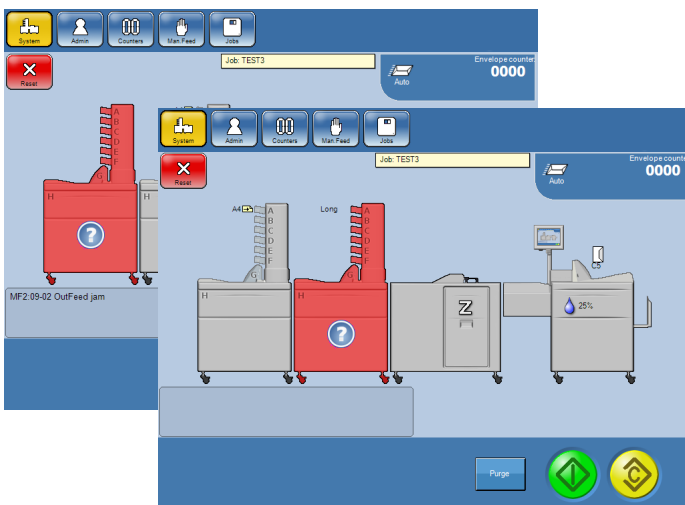
Open cover and remove the envelope from the sealing beam.

DMI:0326 Infeed miss

This screen is shown if the paper has failed to be fed.

- Press the [Reset] button to exit message and restart the system.
- Contact an authorized technician if the error consists.

Mailfeeder Fault Codes



All Mailfeeder fault codes listed below are presented as shown in the figure. The error code is the only thing that differs.

MF2:0902 Outfeed jam

Paper jam in the Mailfeeder outfeed area.

- Lift off the outfeed hatch and remove the paper, see section **6 Clearing a Paper Jam**.
- Press the [Reset] button to exit message.

MF2:1011 No feed sequences

Mailfeeder settings are missing.

- Set feed sequence in the Mailfeeder settings according to section **4 Settings**.
- Press the [Reset] button to exit message.

Too Long

The paper/booklet is too long, compared to calibrated trial piece value. Probable cause is double feeding or wrong paper in bin.

- For the BF, adjust separation pressure as described in Load Booklets in BF under section **1 Basics**.

Continued on next page.

Mailfeeder Fault Codes, continued

- Clean separator pad as described in Maintaining Your Machine under section **8 General Remarks**.

Too Short

The paper/booklet is too short, compared to calibrated trial piece value.

Probable cause is wrong paper in bin whole running trial piece or paper skewed when fed.

- Check paper and if necessary run trial piece again.
- Make sure side guides are up against the stack.

Timeout

This fault code is shown when the Accumulator has not received the expected material.

Too Thick/Too Thin

The paper/booklet is too thick/thin, compared to calibrated trial piece value.

Probable cause is double feeding, wrong paper in bin or not correctly loaded papers.

- For the BF, adjust separation pressure as described in Load Booklets in BF under section **1 Basics**.
- Clean separator pad as described in Maintaining Your Machine under section **8 General Remarks**.
- If the cause is not double feeding, check paper and make sure all sheets are turned in the same direction.

Note

If a jam or double feed occur when feeding a pre-collated set, make sure the pre-collated set in bin is complete to ensure correct order of documents in envelope when continuing the inserting process.

Empty

Refill papers/booklets.

Note

If the paper is printed black and loaded so the black area is placed where the empty sensors are positioned, the sensors may wrongly indicate that the bin is empty.

Miss

The paper could not be fed.

- For the BF, adjust separation pressure as described in Load Booklets in BF under section **1 Basics**.
- For the TF, make sure all sheets are placed up against the separation beam as described in Loading Paper in the TF under section **1 Basics**.
- Clean feed rollers as described in Maintaining Your Machine under section **8 General Remarks**.

Continued on next page.

Mailfeeder Fault Codes, continued

Jam

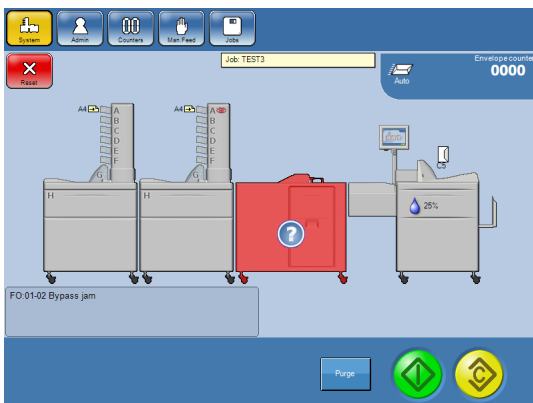
Remove the paper, see section **6 Clearing a Paper Jam**.

- Clean the separation pads as described in Maintaining Your Machine under section **8 General Remarks**.
- Clean feed rollers as described in Maintaining Your Machine under section **8 General Remarks**.
- Make sure the sheets/booklets are properly loaded as described in section **1 Basics**. Make sure the sheets are well fanned, aligned and that the ink has dried out.

Note

If a jam should occur when feeding a pre-collated set, make sure the pre-collated set in bin is complete to ensure correct order of documents in envelope when continuing the inserting process.

Folder Fault Codes



All Folder fault codes listed below are presented as shown in the figure. The error code is the only thing that differs.

FO:0102 Bypass jam

Paper jam in Folder bypass area.

- Lift top cover and outsort bin to remove paper.
- Press the [Reset] button to exit message.

FO:0203 Infeed miss

This screen is shown if the paper has failed to enter.

- Lift top cover and outsort bin to remove paper.
- Press the [Reset] button to exit message.
- Contact and authorized technician if the error consists.

FO:0304 Compile error

Paper jam in compiler area.

- Open the top cover and set the lower transport belt to lifted position to get access to the compiler.
- Clear the paper jam.
- Press the [Reset] button to exit message.

Continued on next page.

Folder Fault Codes, continued

FO:0406 Fold error

Paper jam in Folder area.

Pull out the fold pocket cover to remove paper. Press the [Reset] button to exit message.

FO:0507 Outfeed miss

Paper jam in Folder area.

Pull out the fold pocket cover to remove paper. Press the [Reset] button to exit message.

FO:0508 Outfeed error

Paper jam in Folder outfeed area.

Lift outsort bin and remove paper. Press the [Reset] button to exit message.

FO:0609 Clear outsort bin

Remove paper from the outsort bin.

FO:0212 Clear infeed area

This screen is shown if you have tried to run the machine while there is still a paper jam in the infeed area.

Lift top cover and remove paper. Press the [Reset] button to exit message.

FO:0313 Clear compile area

This screen is shown if you have tried to run the machine while there is still a paper jam in the compiler.

- Open the top cover and set the lower transport belt to lifted position to get access to the compiler. Clear the paper jam.
- Press the [Reset] button to exit message.

FO:0414 Clear fold area

This screen is shown if you have tried to run the machine while there is still a paper jam in the folder.

- Pull out the folder pocket cover and lift off the fold pocket in which there is a paper jam to clear.
- Press the [Reset] button to exit message.

FO:0515 Clear outfeed area

This screen is shown if you have tried to run the machine while there is still a paper jam in the outfeed area.

- Lift the outsort bin to remove paper.
- Press the [Reset] button to exit message.

Continued on next page.

FO:0419 Fold insert too thick

Folded set is too thick.

Accepted quantities and weights of papers included in the set are described in the “Fold Thickness” chart in section **9 Specifications**.

Adjust set accordingly or divide set, see section **4. Settings**.

FO:0320 Fold insert to small

Folded set is too small.

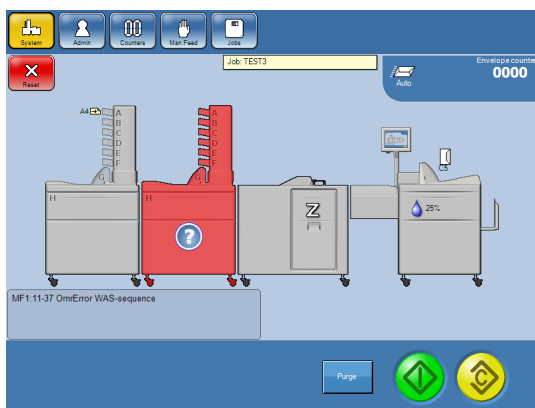
Set the Mailfeeder settings according to the sizes accepted by the Folder in the specifications in chapter 9.

FO:0421 Fold setup mismatch

This screen will be shown when running a trial piece if the Mailfeeder is set to a fold type and the Folder settings is not.

Press the [Reset] button to exit message.

OMR/BCR Errors



All OMR/BCR error codes listed below are presented as shown in the figure. The error code is the only thing that differs.

General procedure

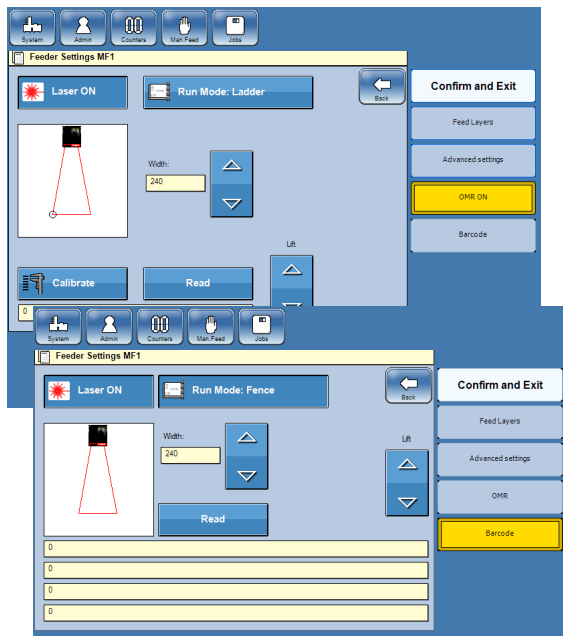
If an error is detected for no obvious reason, follow these steps:

- Make sure the laser beam covers the code plus 15 mm at both ends. See Using an OMR profile or Using an BCR profile in section **4 Settings**.
- Make sure the bin is correctly loaded and that the side guides places the sheets loaded in the centre of the bin. See Loading Paper in TF in section **1. Basics**.
- If you are using OMR, make sure that the scanner is calibrated. See Using an OMR profile in section **4 Settings**.
- Make sure the right OMR/BCR profile is selected. See Using an OMR profile or Using an BCR profile in section **4 Settings**.
- If you are using OMR, make sure that the scanner reads the code from the right direction. See Using an OMR profile in section **4 Settings**.
- Make sure the correct run mode (Ladder / Fence) is chosen. See Using an OMR profile or Using an BCR profile in section **4 Settings**.

Continued on next page.

General procedure, continued

- If BCR code is not possible to read, check that code density is within specification. If this does not correct the problem, check manually that the code can be detected.



- 1 From the Main screen, point at the Mailfeeder.
- 2 Press the [OMR] or the [Barcode] button.
- 3 Press the [Scanner] button.
- 4 Press the [Read] button.

Error codes

MF1:11-33 Error NoCode

No code at all detected.

MF1:11-34 Error Parity

The parity check detected:

- an odd number of marks when parity is set to even (number of marks).
- an even number of marks when parity is set to odd (number of marks).

MF1:11-35 Error Always1

The integrity check detected a 0 (zero) when a 1 (one) was expected.

MF1:11-36 Error Always0

The integrity check detected a 1 (one) when a 0 (zero) was expected.

MF1:11-37 Error WAS-sequence

The sequence counter detected an irregularity in the order the sheets within a sequence was fed. For example counting 24,25,29 instead of 24,25,26.

MF1:11-38 Error SI

The set integrity check detected that the SI value not carried the same value within the same set.

MF1:11-41 Error BOC

No Beginning Of Collation (BOC) could be detected after detecting an End Of Collation (EOC). After detecting an EOC, a BOC is expected on the next sheet. This only applies if BOC is defined in the OMR code since the BOC mark is not mandatory.

Continued on next page.

Error codes, continued

MF1:11-42 Error EOC

A Beginning Of Collation (BOC) has been detected without having detected an End Of Collation (EOC). It is expected that a BOC is immediately preceded by a EOC on the sheet before.

MF1:11-43 Scanner Error Timeout

This error code is generated if the scanner does not reply to the system in time. If general procedure does not help, call for service.

MF1:11-44 Error Scannerbin not included

During cycling up it is detected that Bin A is not included in the list of used bins in the TowerFeeder while scanner is set to On.

MF1:11-45 Error Parity conflict

During cycling up it is detected that both parity even and parity odd are included in the code.

MF1:11-46 Error Hand Feed conflict

During cycling up it is detected that both hand feed last and hand feed first are included in the code.

MF1:11-47 Error BOC without EOC

During cycling up it is detected that an End Of Collation (EOC) is missing in the code.

MF1:11-48 Error Multiple Scanner layers

During cycling up it is detected that an Bin A has been selected in multiple layers.

MF1:11-49 Error Scanner-QTY > 1

During cycling up it is detected that quantity is set to > 1 an Bin A has been selected in multiple layers.

MF1:11-50 Error Scanner as selective

During cycling up it is detected that an Bin A has been set to selective feed.

MF1:11-51 Error Scanner paired

During cycling up it is detected that an Bin A is linked to another bin.

MF1:11-59 Error SSQ-sequence

The set sequence counter detected an irregularity in the order the sheets within a set was fed. For example counting 1,2,5 instead of 1,2,3.

MF1:11-60 Error Scannerbin empty

Bin A is empty.

MF1:11-61 Stopped on STOP-mark

System stopped because a stop mark was detected.

MF1:11-62 Error missing BOC

Beginning Of Collation (BOC) is defined in the code but can not be detected on the first sheet in the set during cycle up.

MF1:11-63 Error BOC conflict

During cycling up several Beginning Of Collation (BOC) marks are defined.

MF1:11-64 Error EOC conflict

During cycling up several End Of Collation (EOC) marks are defined.

8. General Remarks

Do's And Don'ts

- **Always** follow all warnings marked on, or supplied with, the equipment.
- **Always** exercise care when moving the equipment. Always contact service if relocating the equipment.

CAUTION:

Unplug the power cord from the wall outlet and machine before you move or relocate the equipment. Always contact service if relocating the equipment.

- Do not remove covers or guards that are fastened with screws.
- Do not override or bypass electrical or mechanical interlock devices.
- Do not operate the equipment if you notice unusual noises or odours. Disconnect the power cord from the power source and call your authorized technician to correct the problem.

WARNING:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Note

The domestic environment is an environment where the use of broadcast radio and television receivers may be expected within a distance of 10 m of the apparatus concerned.

- Do not switch off the power while the machine is running. Make sure the machine cycle has ended.
- Do not open covers while the machine is running.
- Do not move machine while the machine is running.
- Do not make arbitrary changes to the machine.

Placing Your Machine

Machine Environment

- **Always** locate the equipment on a solid support surface with adequate strength for the weight of the machine.
- **Always** keep magnets and all devices with strong magnetic fields away from the machine.

If the place of installation is air-conditioned or heated, do not place the machine where it will be:

- Subjected to sudden temperature changes.
- Directly exposed to cool air from an air-conditioner.
- Directly exposed to heat from a heater.

Power Connection

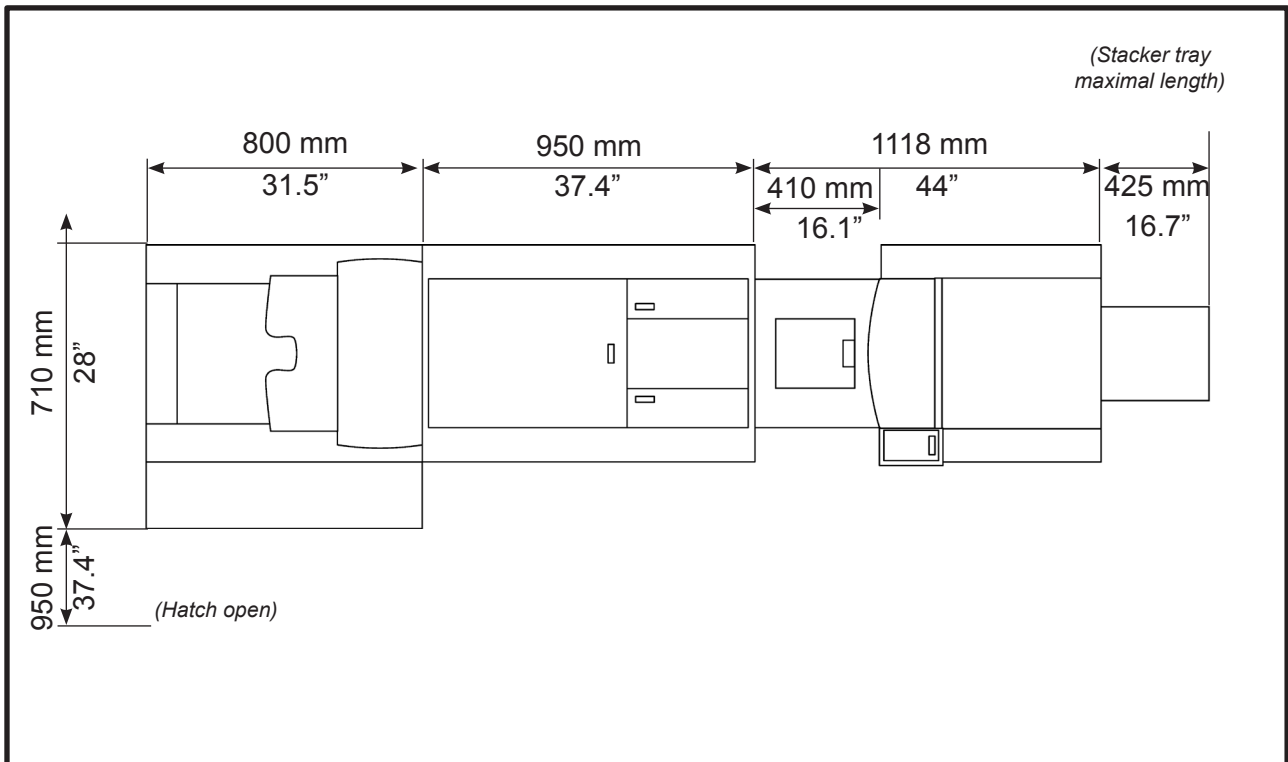
- **Always** connect the equipment to a properly grounded power source. If in doubt, have the power source checked by a qualified electrician.

⚠ **WARNING:** Improper grounding of the equipment can result in electrical shock.

- Never connect the machine to a power source that lacks a ground connection terminal.

Access to Machine

Place the machine near the power source. The machine dimensions are as shown below.



Maintaining Your Machine

 **Caution:**

Never attempt any maintenance that is not specifically described in this documentation.

Inserter

| CHECK POINT | INSTRUCTION | REASON | EACH |
|----------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------|
| All Machine, Paper paths etc. | Clean paper path according to procedure in 8 General Remarks. | Unclean paper paths, due to paper dust can cause paper/envelope jam. | 100 000 inserts |
| Sealing Module paper path | Clean Sealing Module procedure in 8 General Remarks. | Glue residue can cause sealing miss. | 25 000 inserts |

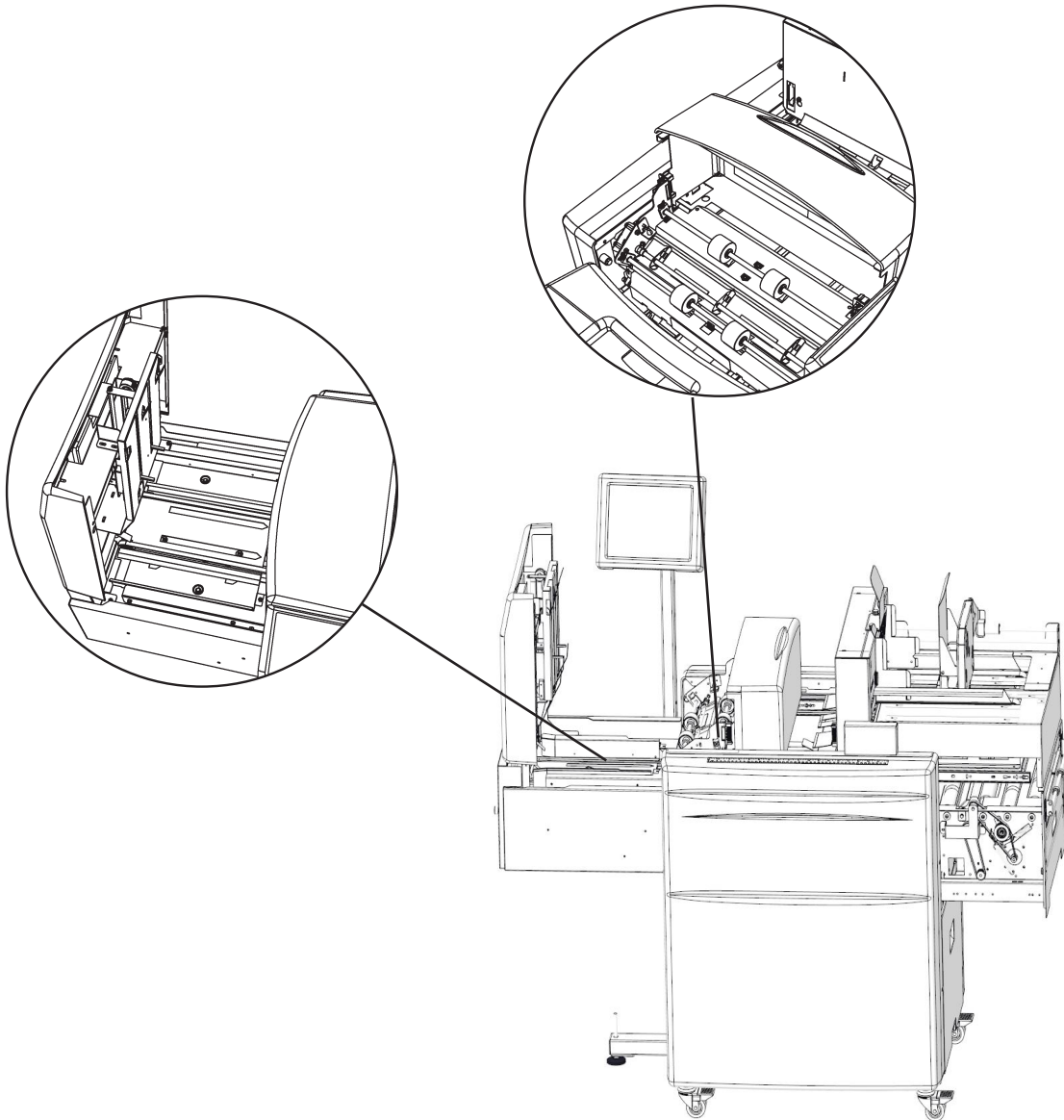
 **Note**

How often the maintenance functions should be done is depending on environment, paper type, print quality etc. Clean more often than suggested above if needed.

Cleaning Paper Path

The machine needs to be cleaned regularly when in use, and if the unit has not been used for a period of time.

Clean every 100 000 inserts or earlier if needed.

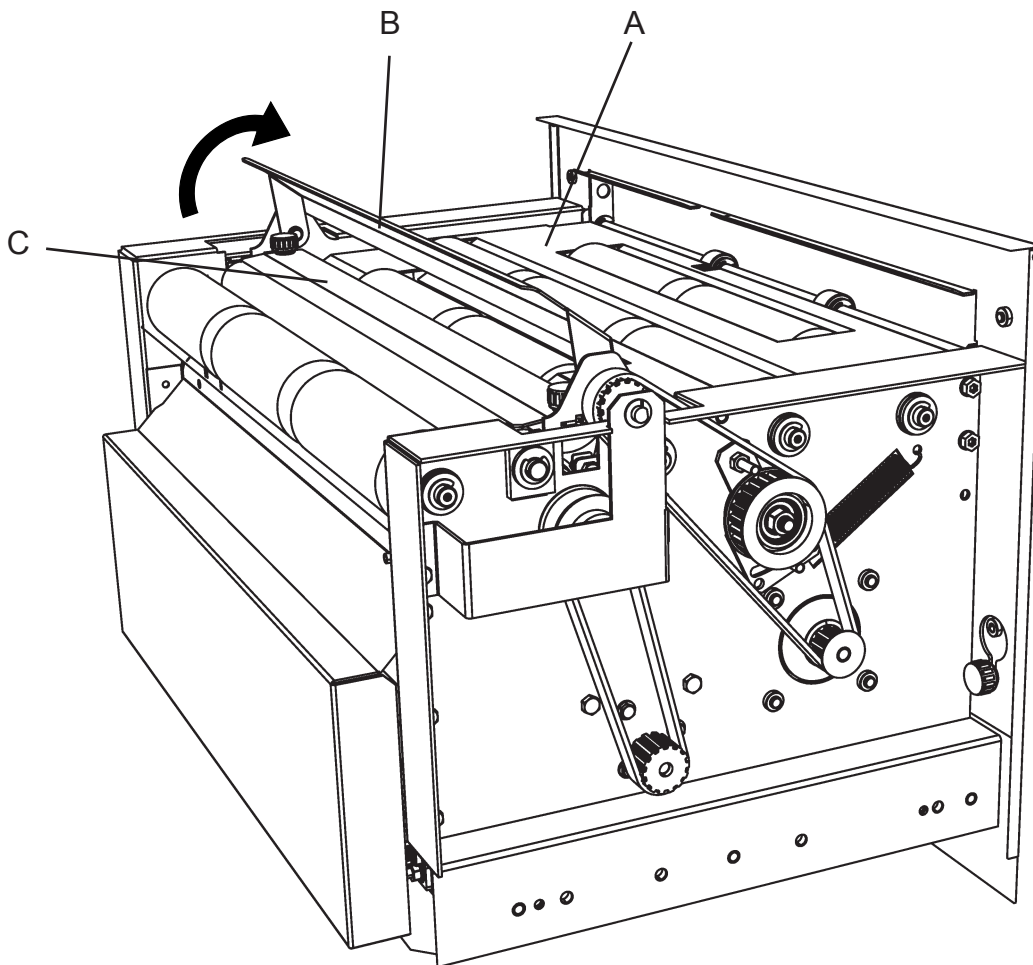


Gently clean the machine from paper dust using a vacuum cleaner, towels and brushes.

Cleaning Sealing Module

Glue build up in the Sealing Module can lead to sealing errors.

Clean every 25 000 inserts or earlier if needed.



Remove glue residue in the sealing module with water. Clean the paper path (A). Lift the sealing flap (B) and clean on both sides. Clean plate (C).

Cleaning the Sealing System

The cleaning program can be started manually from the Admin menu. To do this, follow the steps described below.



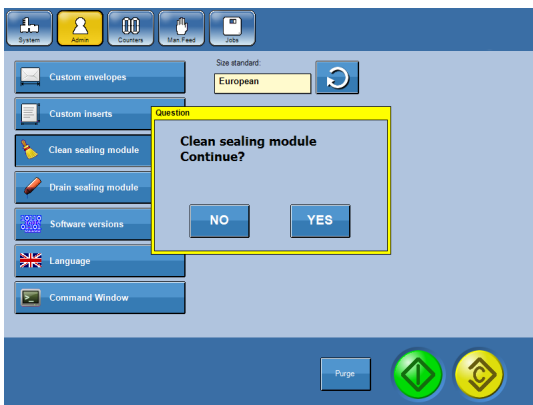
- 1 Fill the fresh fluid container with sealing fluid.
- 2 From the Main screen, press the [Admin] button and then press the [Clean sealing module] button.

 **Note**

Make sure the waste fluid container is not full before running the cleaning program. Cleaning will drain up to 20 cl (7 fl oz).

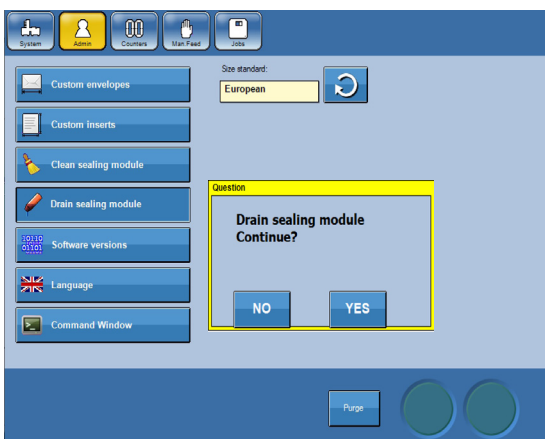
Confirm cleaning the sealing module by pressing the [Yes] button.

- 3 Wait until the cleaning process is finished (message disappears).
- 4 Remove and drain the waste fluid container.



Draining the Sealing Module

The drain program should be used before machine is moved or if the water filter needs to be replaced..



- 1 From the Main screen, press the [Admin] button and then press the [Drain sealing module] button.
- 2 Confirm drain sealing module by pressing the [Yes] button.
- 3 Wait until the cleaning process is finished (message disappears).
- 4 Remove and drain the waste fluid container.

Removing / Replacing Water Filter

Unclean Water Filter can cause dirty and / or clogged Water Tray in the sealing module

Replace every 4,000,000 inserts or earlier if needed.



1 Drain the sealing module (see Draining the sealing module).

2 Open the Sealer unit, if system is equipped with a Belt stacker, move that to the side first.



3 Remove thumbscrew on left and right side of the Sealer module, then lift and remove the Sealer module cover.



Thumb screws

4 Remove filter by un-screwing it.



Mailfeeder(s)

| CHECK POINT | INSTRUCTION | REASON | EACH |
|-------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|
| Feed rollers | Clean feed rollers procedure in 8 General Remarks . | Unclean rollers can cause paper misfeeds. | 50 000 inserts |
| Separator pads | Clean separator pads procedure in 8 General Remarks . | Unclean separator pads can cause double feeds | 50 000 inserts |
| Vertical transport belt | Clean transport belt procedure in 8 General Remarks . | Unclean transport belt can cause paper jam and colour deposits from the print-outs may leave marks on the papers. | 100 000 inserts |

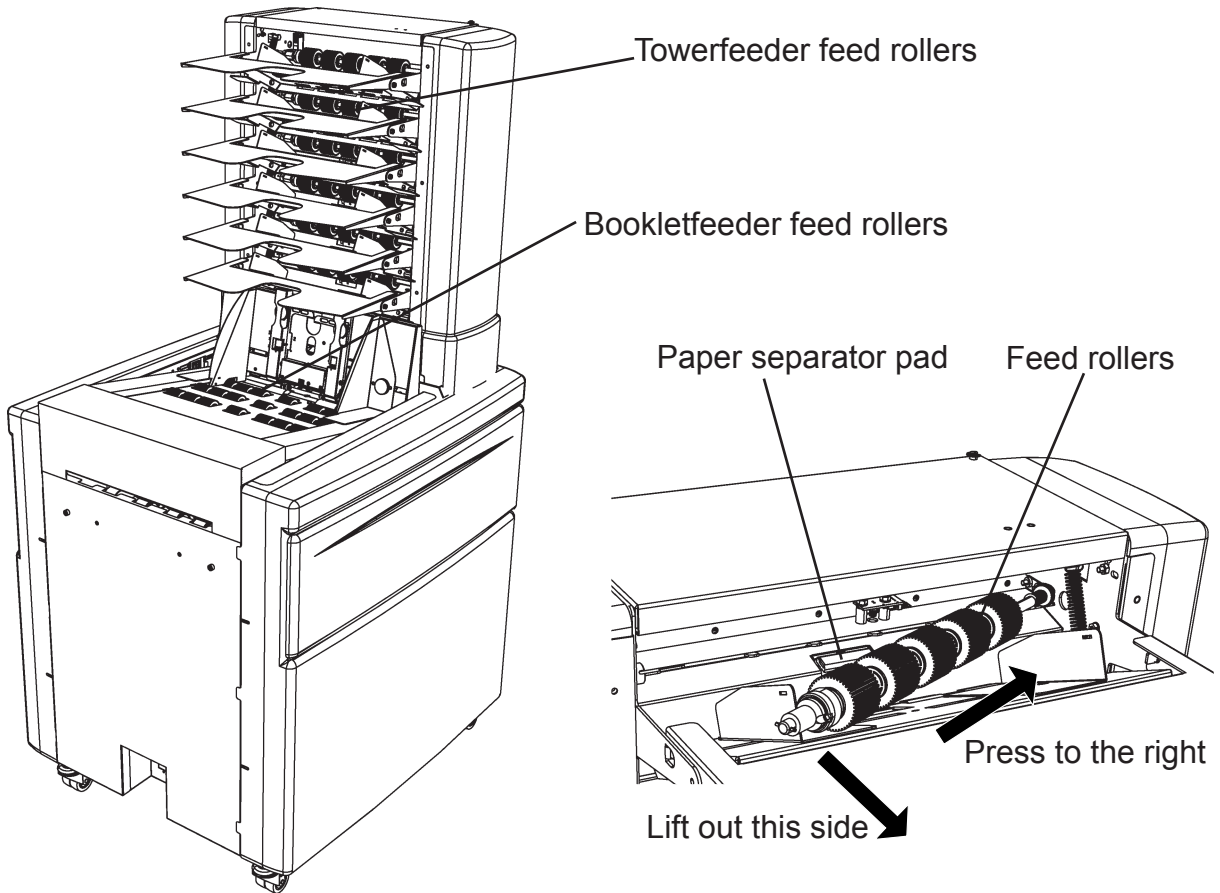
Note

How often the maintenance functions should be done is depending on environment, paper type, print quality etc. Clean more often than suggested above if needed.

Cleaning Feed Rollers

Unclean rollers can cause paper misfeeds.

Clean every 50 000 inserts or earlier if needed.



Remove the Towerfeeder roller assembly shaft by pressing it to the right side. The left end of the feed roller assembly will now be released and the assembly can be removed.

Note

To facilitate removal of the feeder roller assembly first remove the bin extension plate.

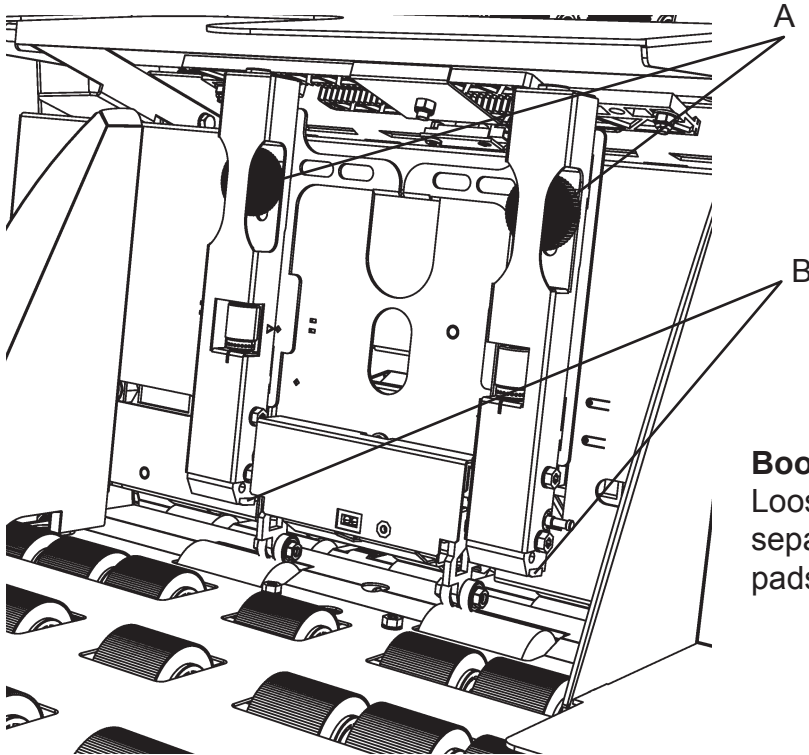
Clean the feed rollers both on the Towerfeeder and the Bookletfeeder.

While the feed roller assembly is removed, clean the paper separator pad as described on the next page.

Cleaning Separator Pads

Unclean separator pads can cause double feeds.

Clean every 50 000 inserts or earlier if needed.

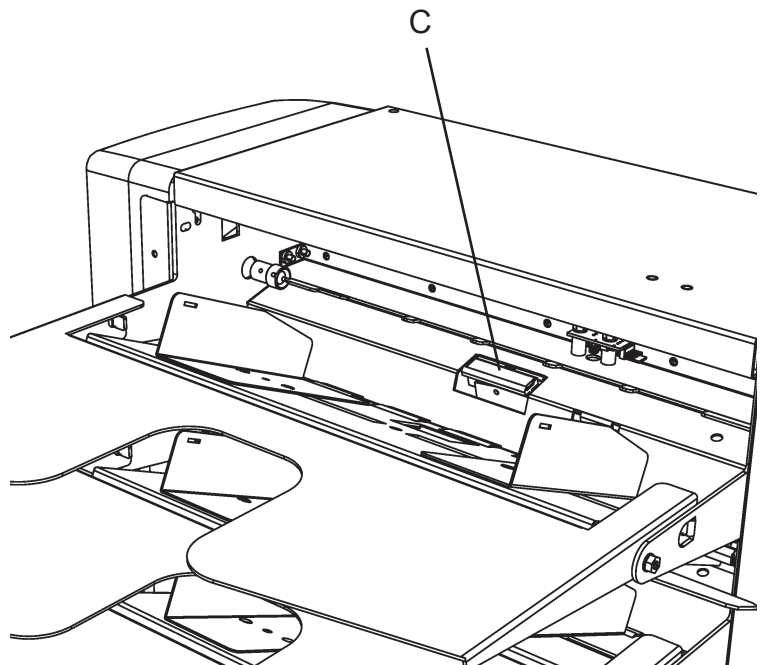


Bookletfeeder

Loosen the screws (A) and lift the separators. Clean the separator pads (B).

Towerfeeder

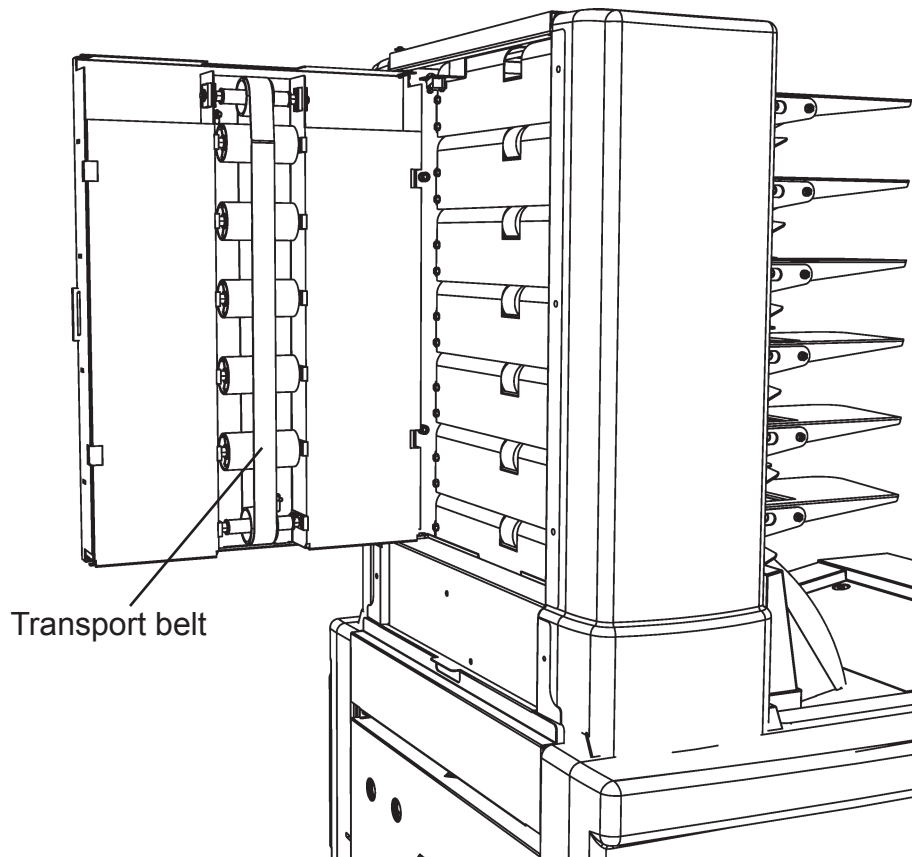
Remove the feed roller assembly as described on previous page. Clean the separator pads (C).



Cleaning Transport Belt

Unclean transport belt can cause paper jam and colour deposits from the print-outs can leave marks on the papers.

Clean every 100 000 inserts or earlier if needed.



Open the Towerfeeder door and clean the transport belt.

Folder

| CHECK POINT | INSTRUCTION | REASON | EACH |
|-------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------|
| All machine, paper paths etc. | Clear paper path according to note below. | Unclean paper paths, due to paper dust can cause paper jam. | 100 000 inserts. |
| Fold rollers | Clean fold rollers procedure in 8 General Remarks . | Unclean rollers can cause paper jam. | 50 000 inserts |
| Transport belts | Clean transport belt procedure in 8 General Remarks . | Unclean transport belt can cause paper jam and colour deposits from the print-outs may leave marks on the papers. | 100 000 inserts |

 **Note**

How often the maintenance functions should be done is depending on environment, paper type, print quality etc. Clean more often than suggested above if needed.

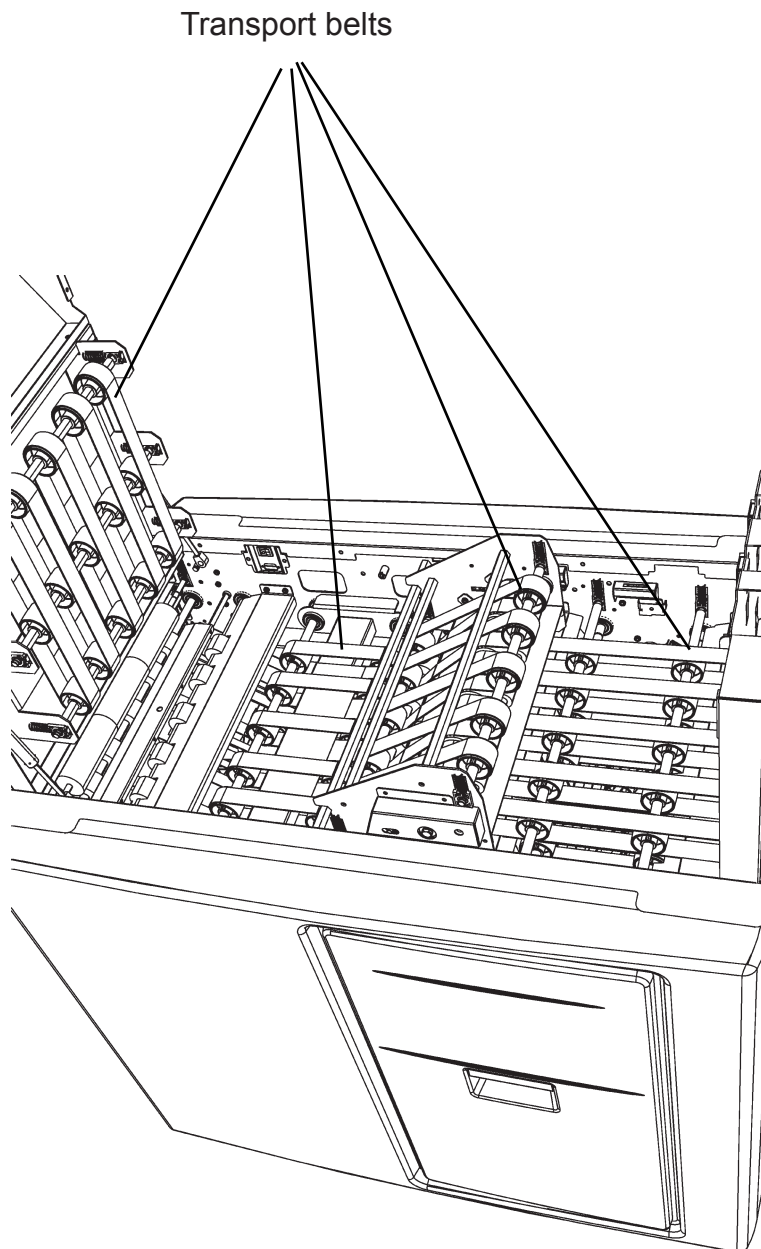
 **Note**

Use vacuum cleaner, towels, brushes to clean the machine and the paper path.

Cleaning Transport Belts

Unclean transport belt can cause paper jam and colour deposits from the print-outs can leave marks on the papers.

Clean every 100 000 inserts or earlier if needed.

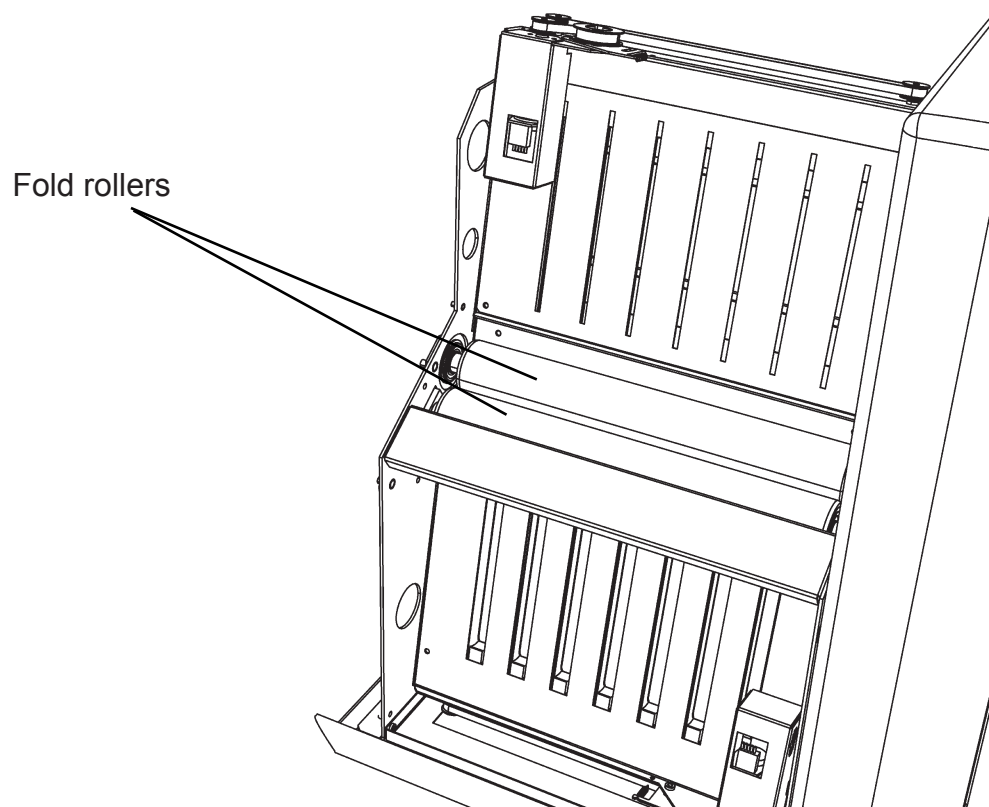


Lift the top cover and the outsort bin to clean the transport belts.

Cleaning Fold Rollers

Unclean fold rollers can cause paper jam.

Clean every 50 000 inserts or earlier if needed.



Clean the fold rollers on the Folder.

9. Specifications

Machine Specifications

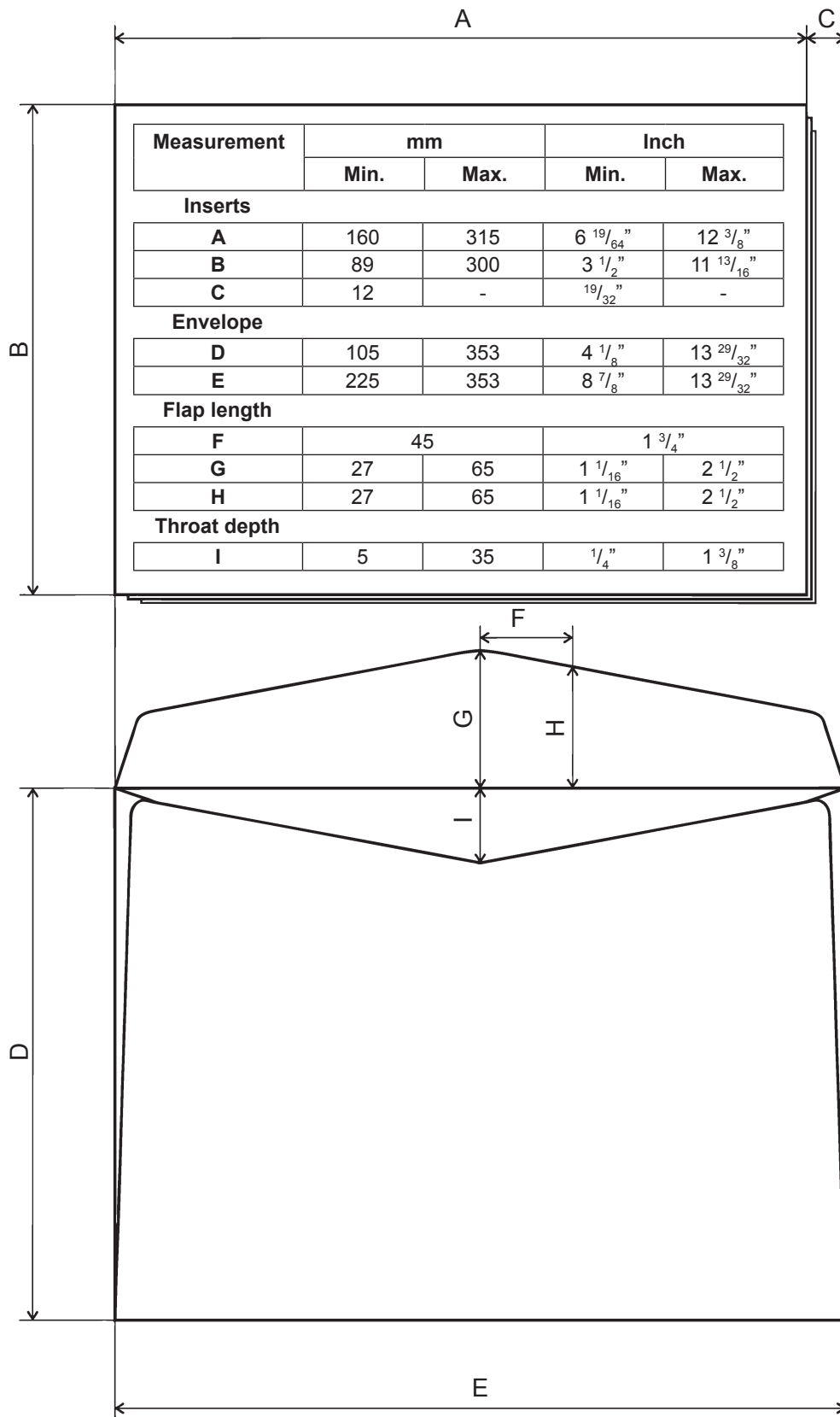
DMI Inserter

| | | |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Speed: | Up to 4000 inserts/hour (see section Speed Guidelines). | |
| Filling capacity | Up to 12 mm (½") (see section Filling Capacity). | |
| Envelope type* | Water sealing envelopes or pocket envelopes with or without window, wallet or pocket (booklet or catalog) | |
| Envelope size (H x W)* | Min: | 105 x 225 mm (4.33" x 8.8") |
| | Max: | 353 x 353 mm (13.9" x 13.9") |
| Envelope weight* | Min: | 75 gsm (20 lb Bond) |
| | Max: | 110 gsm (28 lb Bond) |
| Insert size (H x W)* | Min: | 89 x 160 mm (3.5" x 6.3") |
| | Max: | 300 x 315 mm (11.8" x 12.4") |
| Paper weight | Min: | 60 gsm (40 lb Book) |
| | Max: | 200 gsm (125 lb TAG) |
| Counter | Yes. | Total counter, Resettable counter and Preset counter. |
| Jam detection | Yes. | <ul style="list-style-type: none"> • Envelope misfeed detection • Flap opener detection • Envelope opening detection • Insertion detection • Sealing detection |
| Stacker full detection | Yes | |
| Dimensions | Height: | 1050 mm (41.3") |
| | Length: | 1200 mm (47.2") |
| | Depth: | 750 mm (29.5") |
| Weight | 141 kg (310 lb) | |
| Voltage | 100-240 V ac ±10 %, 50-60 Hz | |
| Input current | 1.5-3.2 A | |
| Noise emission L _{pA} ** (Operator position) | Stand by | 41 dB (A) |
| | Operating | 73 dB (A) |
| Power consumption | 300 W | |
| Heat emission | 300 Joule/s 0.28 BTU/s | |
| Protection Class | IP X0 | |
| Safety Class | Class I | |

* See Detailed Envelope Specification

** Test result of complete system

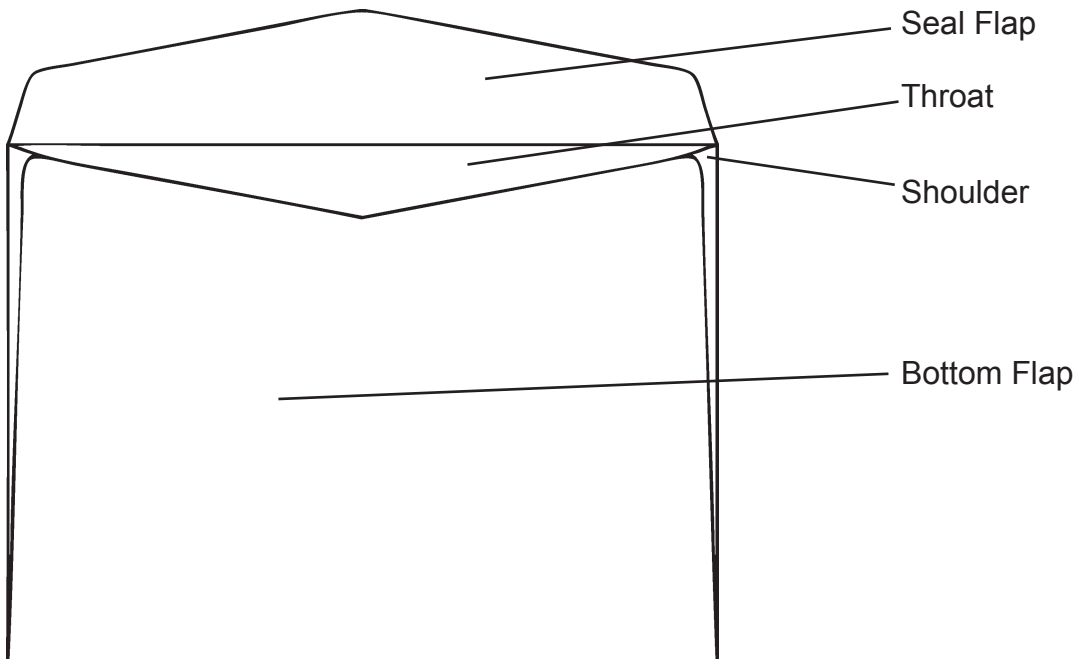
Detailed Envelope Specification



Detailed Envelope Specification, continued

There are some tolerances within measurements C, G, H and I. If an envelope type is outside the specification, the envelope needs to be tested to make sure it runs properly in the machine.

Inserts smaller than “A minimum” could be accepted provided that they are placed between inserts that are larger than measurement “A minimum”.



Seal Flap

The shape of the seal flap is not a critical point for envelopes without windows. In general pointed flaps are preferred. If the flap is straight it works best if the corners are angled.

The shape of the seal flap is of secondary importance, although the flap size should not be above measurement G or below measurement H. Measurement G is determined in the machine by a sensor. Measurement H is determined by the location of rollers holding the flap while inserting. The distance between these rollers is $2xF$ (F from the centre and out on each side).

Sealing Methods

Seal adhesive (Gum) activated by moistening is the recommended sealing method. Release tape applied over a sticky adhesive can also be used but only for inserting, not sealing. The machine must then be run in no-sealing mode. These types of envelopes come in many different shapes. To make sure a certain type of strip and grip envelope works it must be tested prior to recommendation.

All other methods such as self-adhering latex etc. cannot be used.

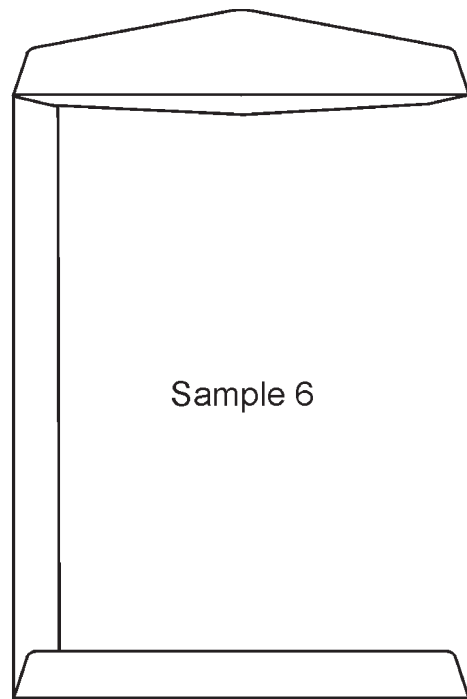
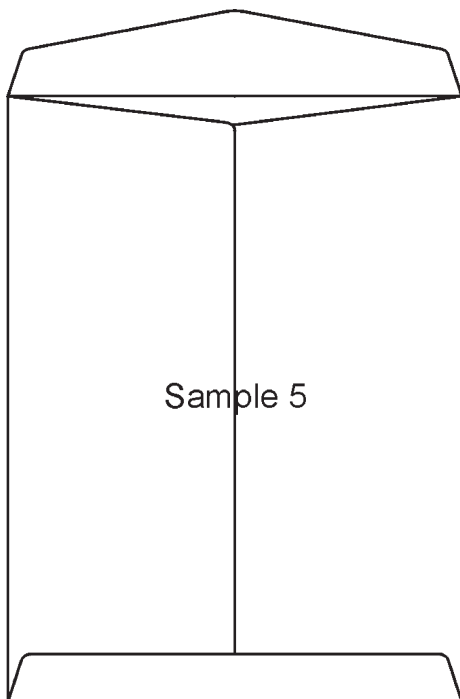
Detailed Envelope Specification, continued

Envelope Stiffness

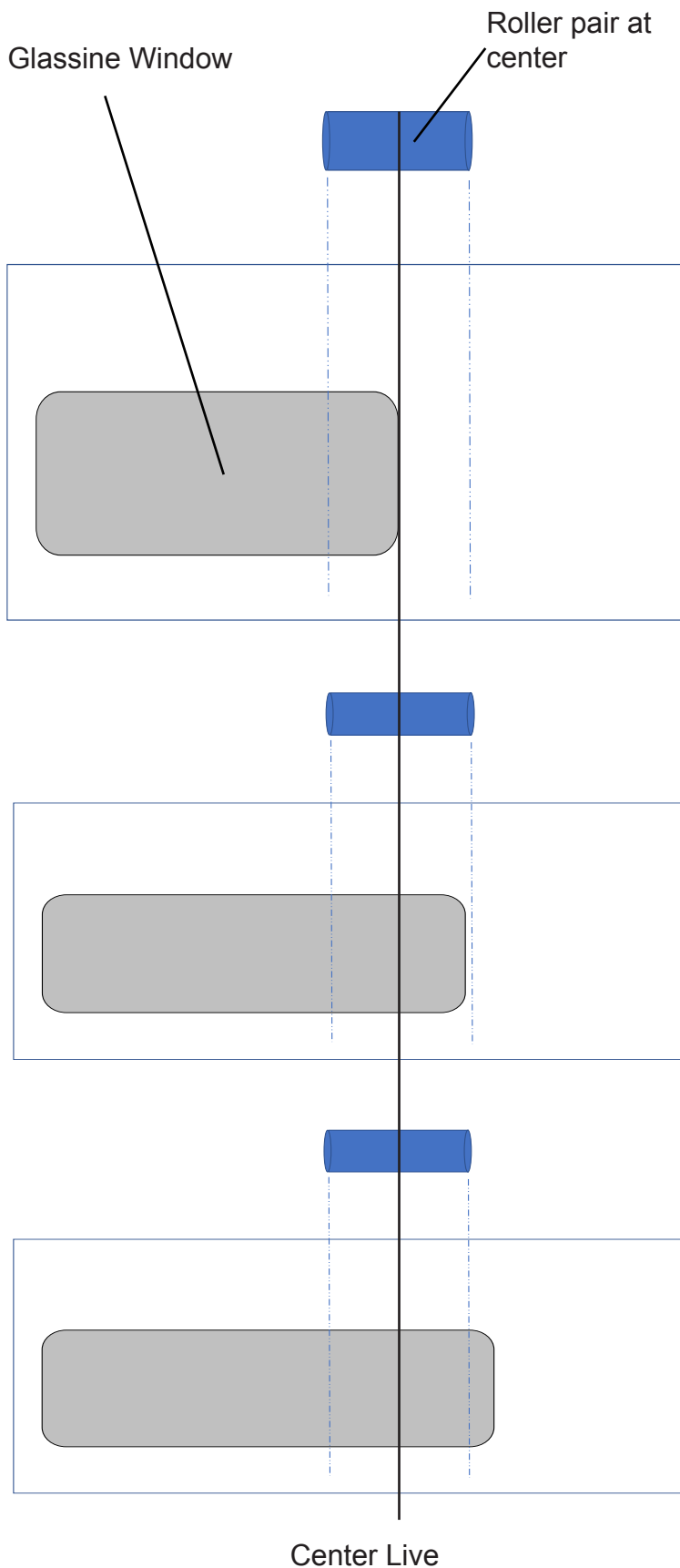
Envelope stiffness is important. If the envelope is too stiff it will jam or buckle in the machine. Standard machine type envelopes ranging from 75 (20 lb Bond) to 110 gsm (28 lb Bond) are recommended. Paperweights are difficult to specify due to that the stiffness for the same paperweight can vary with different materials. Also, humidity decreases the stiffness.

Seam Style

For open-end “catalog” envelopes, centre seam is to be recommended (Sample 5). Make sure measurement I is within specification.



Detailed Envelope Specification, continued



The Singulation/Feed Roller pair are positioned at the Feeder center line.

Many Large Window envelopes start on one side of the envelope and continue well past the center line.

In this case, the path of the envelope will be fed so that the roller is placed directly on the window. In some cases with the feed roller touching the window as the singulation process takes place, a bubble on the window can appear. This will result in a crease at the transition between the window as its fed out of the feeder.

It is recommended to have no less than 6 mm of contact between roller and the paper on the side of the window.

To compensate for creases, try adding a Skew Delay 0-3 ms using the process detailed in the Envelope feed skew procedure.

Window placements that causes roller pair to drive on window alone are not recommended.

Detailed Envelope Specification, continued

Side Seam Envelopes

1. Envelope dimensions should not vary more than +/- 1/16" (1.6 mm).
2. Side seams should be securely bonded to the back flap without exhibiting any curl or ripple between back flap and side seams.
3. The side seams should have the adhesive line within 1/16" (+1/16"), (1.6 mm +/- 1.6 mm) of the top edge of the back within 1/4" (6.4 mm) of the inner edge of the side seam and within 1/8" of the outer edge.
4. All window patches should be flat, ripple free and bonded within 1/16" (1.6 mm) of the top edge of the patch material and the edge of the window cut out(s). If the window patch area is 1/3 or more of the total area of the envelope's front panel, then the envelope must be tested.
5. In those cases where any part of the side of the patch material is within 1" (25 mm) from any envelope side edge, the following shall apply:
If the top of the patch material falls within 3/8" (9.6 mm) of the crease score line, the patch material shall be raised to within 1/16" (3.1 mm) or closer to the crease line.
In addition, the throat shall be at least 1/4" (6.4 mm) below the crease line at 3/4" from the side edges. This is required to prevent the throat openers from tearing the patch.
6. Envelope curl or twist should not exceed 1/4" (6.4 mm) when the envelope is placed on a flat surface.
7. Paper stock may range from 20 lbs. (75g/m²) minimum to 28 lbs. (110g/m²) maximum, but 24 lbs. (90g/m²) is suggested.
8. The top edge of the side seam should be even with or up to 1/16" above the top edge of the back panel.
9. The maximum flap depth on minimum length envelopes is 2-1/2" (64 mm).
10. The length of the enclosure should not be equal to the distance between the side seam edges. When possible, the enclosure length should be greater than this dimension, with consideration that the correct end clearance is maintained.
11. Envelopes whose characteristics fall outside of these construction guidelines must be evaluated.
12. Distance between glue line and the envelope edge should be 1/8" or less.

Open End or Open Side

Open side envelopes usually perform best in the machine. 9 x 12" (C4) envelopes for 8½ x 11" (A4) inserts are to suggest. If running more/thicker inserts, up to ½ inch (12 mm), the envelope should be larger.

When running open side envelopes for inserts of folded 8½ x 11" sheets (or 5½ x 8½" flat sheets), the envelope width must be at least 9 due to measurement C.

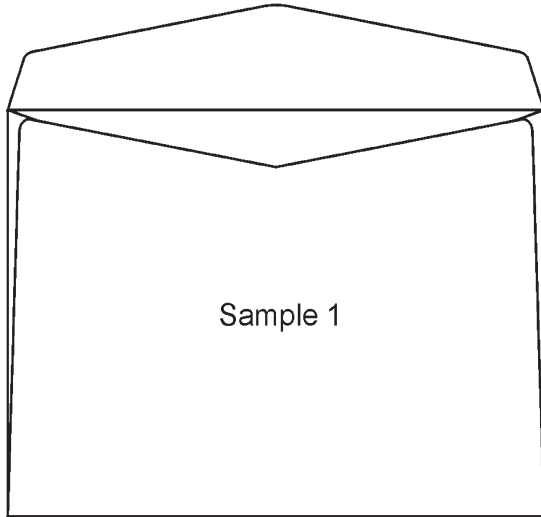
For open-end envelopes, pay attention to measurement C. For 8.5 x 11 inserts, 9 x 12 envelopes are not recommended due to measurement C (right on the edge of specification). Preferably use a larger envelope.

Detailed Envelope Specification, continued

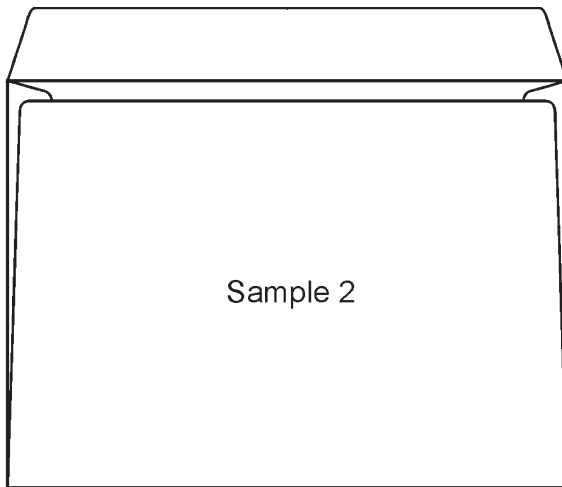
Diagonal Seam Envelopes

1. Envelope dimensions should not vary more than + 1/16" (1.6 mm).
2. All side flaps should be securely bonded to the bottom flap without exhibiting any curl or ripple between the bottom flap and side seams.
3. The maximum depth flap on the minimum length envelope is 2-1/4" (57mm).
4. All window patches should be flat, ripple free and bonded within 1/16" (1.6 mm) of the top edge of the patch material and top and bottom edges of the window cut out(s). If the window patch area is 1/3 or more of the total area of the envelope's front panel, then the envelope must be tested.
5. In those cases where any part of the side of the patch material is within 1" (25 mm) from any envelope side edge, the following shall apply:
 - If the top of the patch material falls within 3/8" (9.6 mm) of the crease score line, the patch material shall be raised to within 1/16" (3.1 mm) of the crease line.
 - In addition, the throat shall be a maximum of 1/4" (6.4 mm) below the crease line at 3/4" from the side edges.
6. Envelope curl or twist should not exceed 1/4" (6.4 mm) when the envelope is placed on a flat surface.
7. Paper stock may range from 20 lbs. (75g/m²) minimum to 28 lbs. (110g/m²) maximum, but 24 lbs. (90g/m²) is suggested.
8. Envelopes whose characteristics fall outside of these construction guidelines must be evaluated.

Bottom Flap to Shoulders

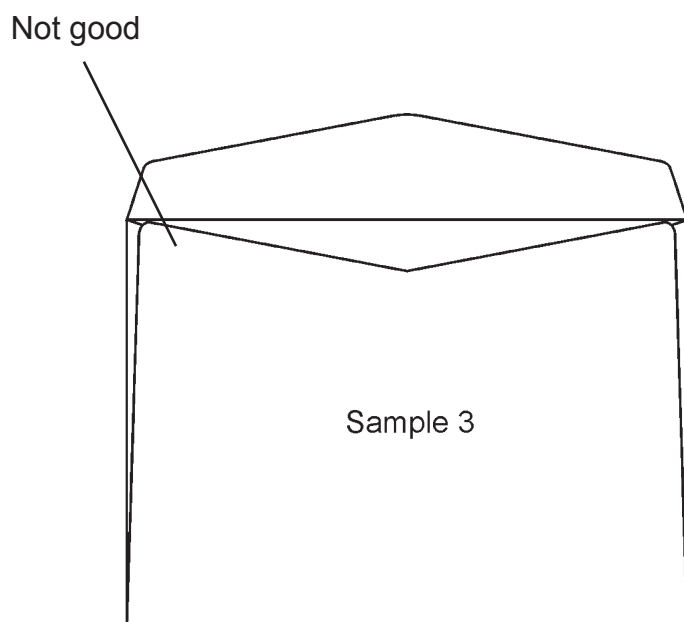


The left and the right top corners of the bottom flap should be in line with the top of the shoulders (see Sample 1).



It is acceptable if the left and the right top corners of the bottom flap are positioned slightly lower than the top of shoulders (see Sample 2). If so, make sure measurement I is not exceeded and most important that the inserts edges reach the shoulders on both sides. Also it makes difference how far up the bottom flap is glued to the shoulders. It should be glued as far up as possible. Sample 2 is more forgiving than Sample 4 if it is not glued all the way up.

Detailed Envelope Specification, continued



The left and right corners of the bottom flap should however not be higher than the top of the shoulders (see Sample 3).

Speed Guidelines

| Detail | Insertions/hour | Criteria |
|---------------------------------------|-----------------|-------------------|
| High Speed (Inserts < 1 mm) | 4 000 | DL/#10 |
| | 3 700 | C5/ 6x9 |
| | 3 400 | C4/Flats (Wallet) |
| | 2 000 | C4/Flats (Pocket) |
| Medium Speed (Inserts 1 mm – 3 mm) | 2 800 | DL/#10 |
| | 2 700 | C5/6x9 |
| | 2 400 | C4/Flats (Wallet) |
| | 2 000 | C4/Flats (Pocket) |
| Low Speed (Inserts > 3 mm) | 2 000 | DL/#10 |
| | 1 900 | C5/6x9 |
| | 1 700 | C4/Flats (Wallet) |
| | 1 200 | C4/Flats (Pocket) |

NOTE: Speed guidelines are calculated on one sheet into an envelope.

Automatic speed mode

The system automatically adjusts the speed depending on the feeding sequence, size of the format and the thickness of the inserts.

The graphical LCD display shows the text “AUTO” on the left side of the speed indicator when auto speed is chosen.

Practical Production Volume

An expected daily production volume lies between 10 000 and 20 000 filled envelopes per day and the recommended maximum production is up to:

Monthly - 500 000 filled envelopes

This is an estimate based on a normal work shift and is depending on system configuration, application and the quality of the used material.

The machine can be run continuously.

Counters

The System has a total counter in the graphical display. The total counter data is stored on an eeprom, which is moveable to a new board if necessary.

The graphical display also shows a resettable counter and a preset counter, which stop the machine when the preset amount of filled envelopes is reached.

Filling Capacity

Always make sure to have enough clearance in the envelope for the thickness of the inserts.

Use following calculation:

Clearance = 12 mm (0,50")(Measurement C) + (thickness of the inserts – 5 mm (0,2"))
5 mm (0,2") insert thickness is default included in the measurement C (12 mm (0,50")).

Note: Clearance must never be less than 12 mm (0,50").

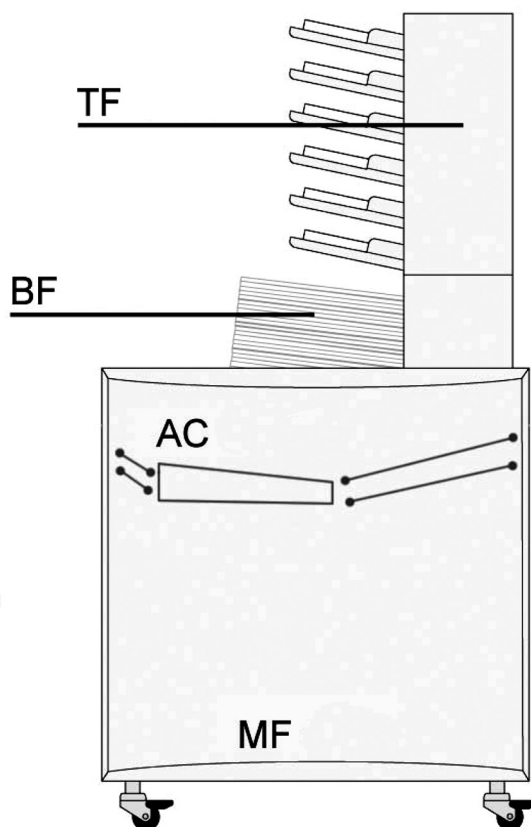
Some envelopes are more difficult for the Inserter. If so, chose a larger envelope instead. The thickness is measured as the maximum height, with the documents to be inserted lying on the infeed deck without being compressed.

MF Mailfeeder

The MF Mailfeeder is equipped with at least one of the following separately delivered modules:

- TF Towerfeeder
- BF Bookletfeeder
- AC Accumulator

In Linked mode (Cascade) all trays and the Bookletfeeder can be loaded during run, Feed sequence is set up from the touch screen on the Inserter.



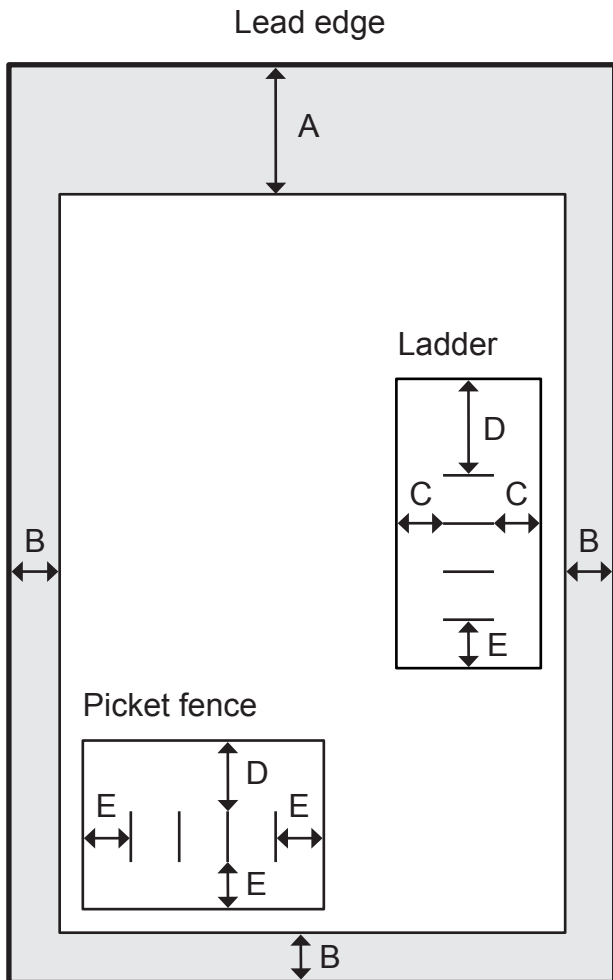
| | |
|-------------------------|---------------------------------------|
| Dimensions (H x W x D) | 885 x 810 x 715 mm (35" x 32" x 28") |
| Weight | 76 kg (167 lb) |
| Dimensions* (H x W x D) | 1550 x 810 x 715 mm (61" x 32" x 28") |
| Weight* | 140 kg (308 lb) |
| Voltage | 100-240 V ac ± 10 %, 50-60 Hz |
| Input current | 1.5-3 A |
| Noise emission | See DMI |
| Power consumption | 300 W |
| Heat emission | 300 Joule/s 0.28 BTU/s |

* Data refers to a fully equipped machine (TF, BF & AC)

OMR/BCR Reader

Scanner

Specification of OMR reading area and OMR marks.



Positioning

Limits:

| | |
|---|---------------|
| A | 65 mm (2.56") |
| B | 5 mm (0.2") |

Clearance:

| | |
|---|--------------|
| C | 10 mm (0.4") |
| E | 15 mm (0.6") |
| D | 20 mm (0.8") |

Mark Specification

Mark thickness

| | |
|-----|-----------------|
| Min | 0,1 mm (0.004") |
| Max | 2 mm (0.08") |

Mark width

| | |
|-----|----------------------------|
| Min | 6 mm (0.24"), Ladder |
| | 12 mm (0.5"), Picket fence |
| Max | N/A |

Distance between marks

| | |
|-----|--------------|
| Min | 1 mm (0.04") |
| Max | 15 mm (0.6) |

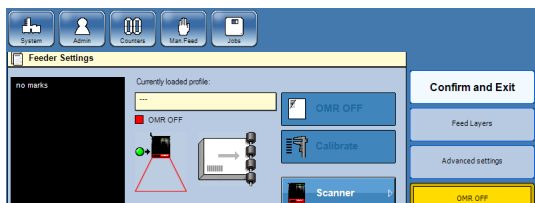
Code length

| | |
|-----|---------------|
| Min | N/A |
| Max | 125 mm (4.9") |

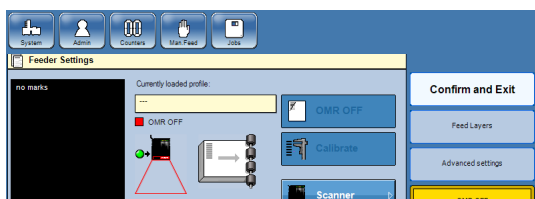
Number of marks

| | |
|-----|-----|
| Min | N/A |
| Max | 32 |

The marks should be black and the background area should be white



Ladder

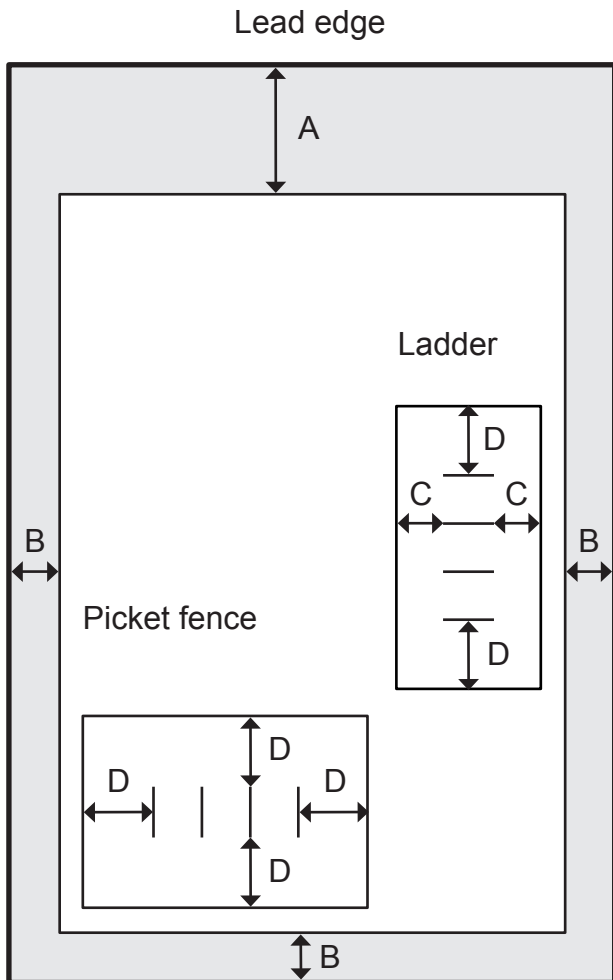


Picket fence

OMR/BCR Reader, continued

Scanner

Specification of Barcode reading area and Barcode marks.



Positioning

Limits:

| | |
|---|---------------|
| A | 65 mm (2.56") |
| B | 5 mm (0.2") |

Clearance:

| | |
|---|--------------|
| C | 5 mm (0.2") |
| D | 15 mm (0.6") |

Barcode specification

Barcode width

| | |
|-----|----------------------------------------------------|
| Min | 6 mm (0.24"), Ladder 12 mm (0.5"), Picket fence |
| Max | N/A |

Barcode length

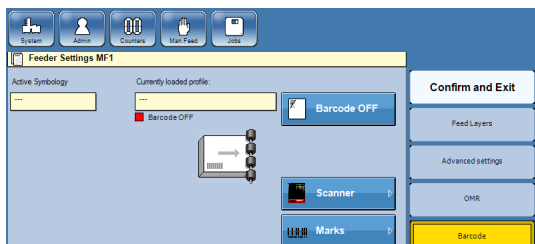
| | |
|-----|---------------|
| Min | N/A |
| Max | 125 mm (4.9") |

Number of characters

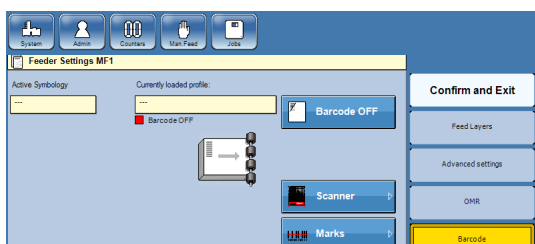
| | Code 39 | I 2 of 5 | Code 128 |
|-----|---------|----------|----------|
| Min | N/A | | |
| Max | 12 | 18 | 10 |

Density

| |
|---------------------------------|
| 10 mil (app. 0,254 mm), (0.01") |
|---------------------------------|



Ladder

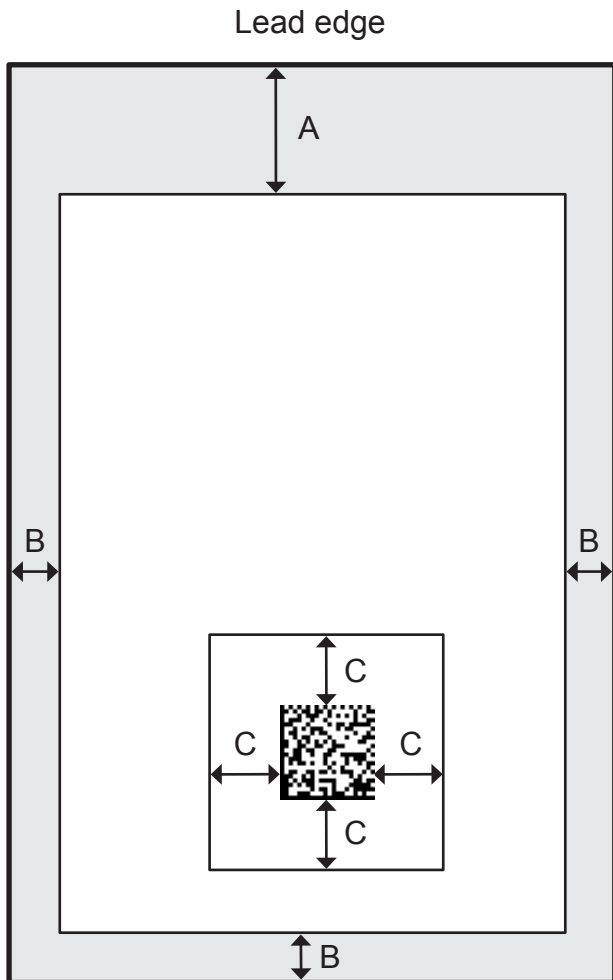


Picket fence

The barcode should be black and the background area should be white

Camera

Specification of 1D & 2D Barcode reading area and 1D & 2D Barcode marks.



Positioning

Limits:

| | |
|---|---------------|
| A | 65 mm (2.56") |
| B | 5 mm (0.2") |

Clearance:

| | |
|---|--------------|
| C | 10 mm (0.4") |
|---|--------------|

Barcode specification

Barcode width

| | |
|-----|------------|
| Min | N/A |
| Max | 50 mm (2") |

Barcode length

| | |
|-----|------------|
| Min | N/A |
| Max | 50 mm (2") |

Number of characters

| | Code 39 | I 2 of 5 | Code 128 |
|-----|---------|----------|----------|
| Min | N/A | | |
| Max | 12 | 18 | 10 |

| | DataMatrix | PDF417 |
|-----|------------|--------|
| Min | N/A | |
| Max | 24 | 24 |

Density

| |
|---------------------------------|
| 10 mil (app. 0,254 mm), (0.01") |
|---------------------------------|

The barcode should be black and the background area should be white

TF Towerfeeder

The TF Towerfeeder is one of three modules in the MF Mailfeeder unit. It is a six-bin feeder with the possibility to be set up as a collator or as a feeder. Each bin can feed different sizes of materials into the same envelope. Set up as a feeder the TF can combine two or more bins to make it possible for the operator to refill during run.

Examples:

Collating - set up as a collator one sheet is fed from each bin.

Feeding - set up as a feeder up 60 sheets can be fed divided on 10 layers.

Linked bin (Cascade) feeding - by loading the same sheet in two or more bins the operator have the possibility to reload the feeder during run.

| | | |
|--------------------------------|------------------------------------------------------------------------|-------------------------|
| Number of bins | 6 (standard bins) | |
| Maximum loading capacity/bin | Standard bin 28 mm (1.1"). Optional high capacity bin 70 mm (2.8")* | |
| Minimum sheet size (H x W) | 89 x 160 mm (3.5" x 6.3") | |
| Maximum sheet size (H x W) | 300 x 420 mm (11.8" x 16.5") | |
| Minimum paper weight | Flat | 60 gsm (40 lb Book) |
| | Pre-fold/fold | 80 gsm* (20 lb Bond)** |
| Maximum paper weight | Flat | 200 gsm (125 lb TAG) |
| | Prefold/fold | 120 gsm* (32 lb Bond)** |
| OMR / BCR reading | Yes (optional) | |
| Folded material loaded in bins | Half folded, C-folded and Reply envelopes | |
| Media orientation | Flat | Landscape or Portrait |
| | Pre-fold/fold | Fold leading |
| | Reply envelope | Flap down and leading |
| Weight | 46 kg (101 lb) | |

* Up to three high capacity bins (optional) can be installed. Each high capacity bin occupies two standard bins.

** Subject for testing

BF Bookletfeeder

The BF Bookletfeeder is one of three modules in the MF Mailfeeder unit. It is capable of feeding single sheets up to booklets with a thickness of 8 mm. The documents from the Bookletfeeder can be fed before, after or between the documents from TF and AC.

| | |
|-------------------------------|-------------------------------------------|
| Maximum loading capacity | 150 mm (5.9") |
| Minimum document size (H x W) | 89 x 160 mm (3.5" x 6.3") |
| Maximum document size (H x W) | 300 x 315 mm (11,8" x 12,4") |
| Minimum document thickness | 80 gsm (20 lb Bond) |
| Maximum document thickness | 8 mm (0.31") |
| Folded material | Half folded, C-folded and Reply envelopes |
| Media orientation | Landscape or Portrait |
| Weight | 11 kg (24 lb) |

AC Accumulator

The AC Accumulator is one of three modules in the MF Mailfeeder unit, the Accumulator receives material from any external feed source, i.e. Sheetfeeder or printer and merges it with the material from the Tower and Bookletfeeder in desired sequence.

| | |
|---------------------------------------|-------------------------------------------------|
| Minimum document size (H x W) | 89 x 160 mm (3.5" x 6.3") |
| Maximum document size (H x W) | 300 x 315 mm (11,8" x 12,4") |
| Minimum document thickness | 60 gsm (40 lb Book) |
| Maximum document thickness | 8 mm (0.31") |
| Media orientation | Landscape or Portrait |
| Weight | 19 kg (41.8 lb) |
| Inlet height, measured from the floor | Adjustable between 751-815 mm (29.5"-32") |
| Inlet speed | Adjustable between 0.5-2 m/s (Default is 1 m/s) |

MFF Folder

| | | |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Speed | Bypass: | Up to 4000 sets/h |
| | Fold: | Up to 4000 sets/h |
| Input paper size, bypass (H x W) | Min: | 93 x 210 mm (3.7" x 8.3") |
| | Max: | 300 x 300 mm (11.8" x 11.8") |
| Input paper size, fold (H x W) | Min: | 270 x 210 mm (10.6" x 8.3") |
| | Max: | 300 x 420 mm (11.8" x 16.5") |
| Output paper size, fold (H x W) | Min: | 89 x 210 mm (3.5" x 8.3") |
| | Max: | 150 x 300 mm (5.9" x 11.8") |
| Paper size, outsort bin (H x W) | Max: | 300 x 300 mm (11.8" x 11.8") |
| Media thickness, bypass | Max: | 8 mm (0.3") |
| Paper Weight | Max: | 200 gsm (125 lb TAG) (bypass) |
| | Max: | 120 gsm (32 lb Bond) (fold) |
| | Min: | 60 gsm (40 lb Book) |
| Max no of sheets | Z-, C-fold | 6 x 80 gsm (20 lb Bond) |
| | Half-fold | 8 x 80 gsm (20 lb Bond) |
| Fold types | <ul style="list-style-type: none"> • Z-fold • C-fold • Half-fold • Double-fold | |
| Fold precision, longitudinal | ±1 mm | |
| Fold skew | ±0.7 mm | |
| Max input paper skew | ±5 mm | |
| Max input paper curl | 8 mm (0.3") (radius > 70 mm (2.7")), measured on a flat surface) | |
| Outsort bin capacity | 25 mm | |
| Dimensions | Height: | 1000 mm (39.4") |
| | Length: | 950 mm (37.4") |
| | Depth: | 710 mm (28") |
| Weight | 175 kg (385 lb) | |
| Voltage | 100-240 V ac +6 % / -10 %, 50-60 Hz | |
| Input current | 2.4 - 1.2 A | |
| Noise emission L _{pA} (Operator position) | Stand by | 48 dB (A) |
| | Operating | 71 dB (A) |
| Power consumption | 240 W | |
| Heat emission | 240 Joule/s 0.23 BTU/s | |
| Protection Class | IP X0 | |
| Safety Class | Class 1 earthed | |

MFF Folder, continued

| | |
|----------------------------------|--------------|
| Operational temperature range | 10-32 °C |
| Humidity | 20 - 85 % RH |
| Tested for up to altitude 2000 m | |

Maximum number of sheets possible to fold together

| Paper weight | Up to 300 x 300 mm (11.8 x 11.8") | | | | Up to 300 x 420 mm (11.8 x 16.5") |
|-------------------------|-----------------------------------|----|---|--------|--------------------------------------|
| | C | V | Z | Double | All fold types |
| 60 gsm (40 lb Book) | 8 | 10 | 8 | 8 | 1 |
| 70 gsm (45 lb Book) | 7 | 9 | 7 | 7 | 1 |
| 80 gsm (20 lb Book) | 6 | 8 | 6 | 6 | 1 |
| 90 gsm (24 lb Bond) | 5 | 7 | 5 | 5 | 1 |
| 100 gsm (26 lb Bond) | 4 | 6 | 4 | 4 | 1 |
| 110 gsm (73 lb Offset) | 3 | 5 | 3 | 3 | 1 |
| 120 gsm (32 lb Book) | 2 | 4 | 2 | 2 | 1 |
| 130 gsm (89 lb Offset) | 1 | 3 | 1 | 1 | 1 |
| 140 gsm (95 lb Offset) | 1 | 2 | 1 | 1 | 1 |
| 150 gsm (40 lb Bond) | 1 | 1 | 1 | 1 | 1 |
| 160 gsm (108 lb Offset) | 1 | 1 | 1 | 1 | 1 |
| 170 gsm (115 lb Offset) | 1 | 1 | 1 | 1 | 1 |
| 180 gsm (120 lb Book) | 1 | 1 | 1 | 1 | 1 |
| 190 gsm (105 lb Index) | 1 | 1 | 1 | 1 | 1 |
| 200 gsm (125 lb TAG) | 1 | 1 | 1 | 1 | 1 |

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