



# TSI-4s



# **Table of Contents**

1	Read this first	1
	Safety	1
	Declaration of Conformity (EU only)	1
	About this manual	1
2	How this Help Works	3
	Help Menu	3
	User Guide	4
3	Meet your Document System	5
	Introduction	5
	Operating Controls	7
	Control Panel	8
	Power Up	9
	How to Operate the Touch Screen	11
	Use a Web Browser	11
	What is a Job?	12
	Job List	12
	Job Overview	13
	MaxiFeeder	16
	Installation of the Side Exit	17
	High Capacity Vertical Stacker	17
	Shut Down the System	18
4	Working with Jobs	19
	Introduction	19
	Use an Existing Job	19
	Create a New Job	20
	About Automatic Jobs	21
	Create an Automatic Job	21

	Create a Manual Job	22
	Create a Test Mail Set	30
	Mail Sets	35
	Change to Another Feeder Tray	39
	Link Feeder Trays	40
	Edit a Job	41
	Save a Job	41
	Delete or Move an Enclosure	42
	Copy a Job	43
	Delete a Job	44
	Rename a Job	44
	Lock a Job	45
5	Loading the System	46
	Document Orientation	46
	Document Feed Trays	46
	Loading Envelopes	52
	Fill the Sealing Liquid Reservoir	54
6	Settings menu	55
	Open the Settings Menu	55
	The Settings Menu Supervisor	56
	Supervisor Settings Menu	57
7	Connect the System to the Internet	72
-	Options for Connection	
	Set up a Wired Connection	
	Set up a Wireless Connection	
	Test the Connection	
8	Reading	77
-	Introduction	
	OCR Code Description	
	BCR Code Description.	

	OMR Code Description	85
	Flex Reading Code Description	88
	Create Jobs with Reading	89
	Reading Settings	94
9	Operator Maintenance	96
	Maintenance Schedule	
	Clean and Replace Brushes	
	Replace or Clean Moistening Cloth	
	Calibrate Photocells	
10	Fault Finding	100
	Messages	
	Clearing Stoppages	
	Operator Troubleshooting	
	Troubleshooting	
44	•	
11	Specifications	
	Technical Specifications	
	Hopper and Feeder Capacity	
	Configuration Dimensions and Weight	114
	Document and Insert Specifications	115
	Envelope and Document Set Specifications	116
	maxiFeeder Specifications	117
	High Capacity Vertical Stacker Specifications	118
12	Terminology	119
	Terminology	119

# 1 Read this First

## Safety



Ensure you have read and fully understood the safety requirements in the Safety Guide.

# **Declaration of Conformity (EU only)**

The product presented in this guide meets the requirements of applicable directives. For more details refer to the Declaration of Conformity. Contact your authorized distributor for availability of this document.

#### About this manual

#### **Disclaimer**

This Guide is published without any warranty. Improvements and changes to the online Guide necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made at any time and without notice. Such changes will, however, be incorporated into new editions of the PDF Guide (if applicable).

# **Symbols**

This manual uses the symbols listed below.

This symbol	Indicates		
lack	WARNING: Indicates a human safety hazard.		
	<b>ATTENTION</b> : A risk to the equipment or mail could result from an action you may perform.		
	NOTE: A remark that explains different cases or specificities.		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	TIP: Advice to help save you time when processing your mail.		
	<b>SUPERVISOR</b> : Indicates that you have to use the supervisor menu to perform the procedure.		

# Languages

In the EU the user guide must be available in the national language(s) of the country where the system is delivered. Therefore, if the User Guide is not available in your country's language(s), contact your authorized distributor.

#### **Software**

The software used for the reading option is based in part on the work of the Independent JPEG Group.

# 2 How this Help Works

## Help Menu

The help button [?] gives access to help topics via a pull-down menu.



The contents of the help menu can be different for your situation. The help menu can contain the following topics:

- Search: use the search engine to find a specific topic.
- User Guide: user instructions describing how to use the system.
- FAQ's (option); when the system is connected to the internet, frequently asked questions are answered here (option).
- What can I do here: a list with relevant help topics related to the current screen.
- Remote assistance (option): online remote assistance for helpdesk guidance. Call
  the phone number that is displayed and follow the instructions of the support assistant.



You can use this guide as follows:

- Use the contents overview to browse the contents. When you are finished you can close the User Guide with the Close button.
- 2. To keep the topic from the User Guide active, you can use the Minimize button. When you click the active Help button, the User Guide is restored.
- **3.** To search for topics; enter a keyword in the Searchbar and press the Search button.

To navigate through the User Guide:

- · Tap to select.
- Swipe up/down to scroll.
- · Double tap to zoom.
- Pinch in/out to zoom in/out.

See also How to operate the touchscreen on page 11

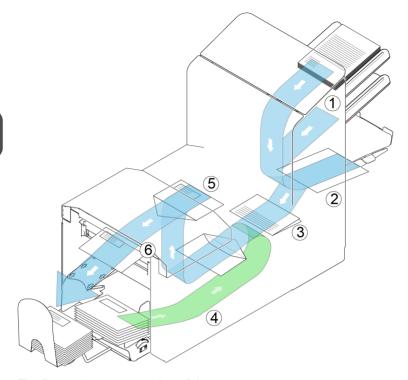
# 3 Meet your Document System

#### Introduction

The system is a folding and inserting system for processing mail easily. The system:

- · feeds documents
- · folds the documents
- inserts the documents into envelopes
- · seals the envelopes
- · stacks the envelopes

Automatic monitoring ensures the correct number of documents per envelope. The system can be operated by means of a user friendly interface. The settings of the system (type of documents, type of envelopes and the type of fold) are recorded in so called jobs. These jobs can be created by the operator.



The figure shows an overview of the system.

#### **Document Feeders (1)**

The Feeder is the feeding part of the system. There are two types of feeders: the automatic and the special feeder. The automatic feeder does not require any adjustments for the separation. From a feeder you can feed one or more documents (multi feed). The feeders have a double feed control (DFC). DFC detects if more documents are fed instead of one. You can link feeders. This means that two feeders can be linked as pairs. When the first feeder is empty, the system switches to the other feeder. Meanwhile the empty feeder can be refilled without stopping the system.

The upper automatic feeder is equipped with a 'daily mail' function. You can use this feeder to process sets of documents that you cannot process automatically (stapled documents and sets with varying thickness).

#### Collating Area (2)

All documents of a document set are collated and aligned in the collating area.

#### Folder unit (3)

The fold unit folds the documents. The following fold types are possible (see Terminology on page 119):

- No fold
- V-fold
- C-fold
- Z-fold
- Double V-fold

#### Envelope feeder (4)

Envelopes that are placed on a stack by the user, are fed one by one into the system by the envelope feeder.

#### Inserter (5)

After the documents are folded, the documents are transported to the inserter. The inserter inserts the documents into a waiting envelope. The inserter seals the envelope or not, depending on the settings. Automatic monitoring ensures the correct number of inserts per envelope.

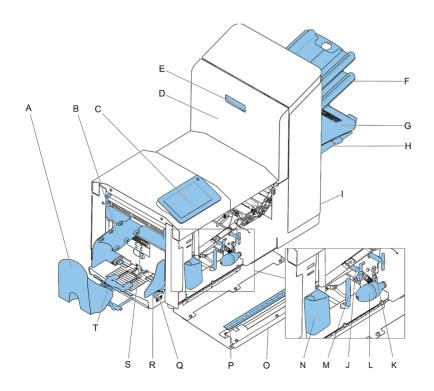
#### Exit (6)

The documents inserted (or not) are transported to the standard Envelope Catch Tray or to the optional "High Capacity Vertical Stacker". The Stacker automatically stacks inserted documents.

## **Operator and supervisor**

You can use the system as operator and as supervisor. The supervisor has access to more settings than the operator. You can switch from operator to supervisor in every screen. When you switch to supervisor, you see immediately the result: extra tabs appear for the advanced settings. Also the side menu contains extra functions.

# **Operating Controls**



- A Envelope catch tray (optional)
- **B** Envelope slide (optional)
- C Control panel
- **D** Upper unit
- E Unlocking handle / hand grip upper unit
- F Document feeders
- G Collator arm
- H Collator area
- I Power inlet, RS232 connector, USB, modem
- **J** Knobs for manual transport/clearing stoppages

- $\boldsymbol{K}$  Airplugs for cleaning the sensors
- L Bellows
- M Handle for clearing stoppages
- N Sealing liquid reservoir
- O Side cover (opened)
- P Ruler
- Q Thumb wheel for side guide adjustment
- R Side guides envelope hopper
- S Knob for separation adjustment
- T Envelope support bracket

#### **Control Panel**



**On/Off (B)**: The touch sensitive button in the upper right corner of the display switches the system on or off. If the system is not used for one hour, the system switches off to safe power.

**Status LED (C)**: A status LED indicates the state of the machine, a green LED indicates that the system is switched on, a blinking red LED indicates the system is switched off.



The display is a capacitive touch screen. To avoid permanent damage of the display, do not use sharp objects to operate the display.



To clean the display use a dry lint-free or microfiber cloth. If water is necessary to clean the screen, you should make your microfiber cloth slightly damp instead of putting the water directly on your screen. Never use large amounts of water, harsh chemicals, abrasive cloths or paper towels to clean the display.

# **Power Up**

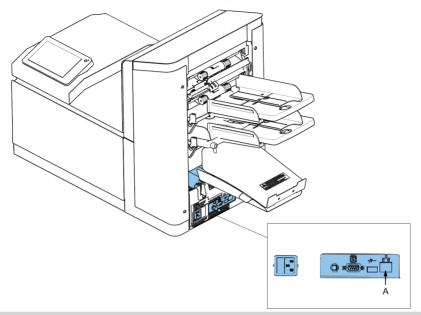
To start up the system:

1. Connect the system to the mains power supply.



You can severely damage the machine if it is connected to the incorrect mains voltage. Before plugging in the machine, check if the local voltage is the same as the voltage mentioned on the type plate.

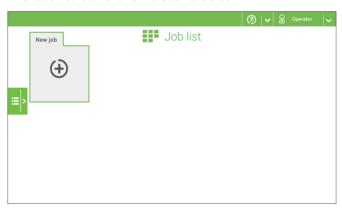
2. Press the on/off button next to the display.





In case the system is unresponsive or fails to switch off, press and hold the touch sensitive power button for 10 seconds to switch off the system.

The touch screen shows the Job list screen.



## **How to Operate the Touch Screen**

You can operate the touch screen like a tablet:

- Tap: touch and release the screen with your finger.
- Swipe: touch the screen, hold it and move your finger(s) left, right, up or down.
- Tap and hold: touch the screen with your finger and hold it for two seconds.
- Pinch in/out: to zoom in/out

#### Use a Web Browser

You can open a web browser in the user interface of the system. Use the web browser as follows:

1. Tap on the icon in the upper left corner of the screen to open the Web browser.



You can tap or swipe to navigate through web sites.Use the keyboard to type in the navigation bar (2) of the browser or within web sites.



If you work with a special keyboard for your language, you can switch the keyboard back to the English version (see Localisation on page 60) to type e.g. a web address.

- 3. Tap the Minimize button (3) to keep the Web Browser active.
- **4.** Tap the Close button (4) in the upper left corner of the screen to close the web browser.



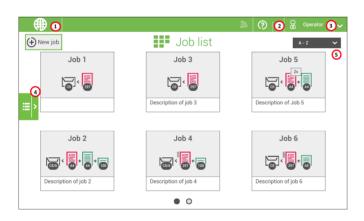
#### What is a Job?

If you have to process a lot of mail sets of the same type (for example bills), you can save the settings to a 'job'. The next time you just select the job and immediately start without defining any settings.

The following settings are saved in a job:

- Envelope type/size:
- · Sealing on/off;
- Which document feeders should be used, how many documents should be fed from each feeder and document height for each feeder;
- · Feeder linking on/off;
- · If BREs or insert cards should be included;
- · Address position;
- · Fold settings:
- · Double feed control settings;
- Reading settings (option);
- Batch Counter, defining the number of mail sets that the job must process. The job will automatically stop processing when this number is reached.

#### **Job List**



When you start up the system, the 'Job list' menu appears. Here you can do the following:

- 1. If you want to open the web browser tap the icon at (1). See also Open a web browser on page 11.
- If you need help tap the question mark for the Help menu. See also Help menu on page
- 3. Tap (3) to get access to the Supervisor or Service menu. See Introduction on page 5.
- 4. Tap (4) to open the Side menu.
- 5. Tap (5) to change the Job list sorting.

The side menu contains the settings menu (see Settings menu operator on page 55). When you are logged in as supervisor, the settings menu is extended with advanced settings (see Settings menu supervisor on page 57).

If you want more information on a job, select the job. With the **[Job list]** button you get back to the home menu.

See also: Working with Jobs on page 19.

#### **Job Overview**



If you want more information on a job, select the job in the Job List menu.

The touch screen shows the following information of the selected job:

- Job name
- Job settings (for example the document and envelope type)
- How to load envelopes and documents for this job
- The number of envelopes that have been processed with this job

In this screen you can change the following settings:

- Counter settings (see Change the counter settings on page 27)
- Job settings (see Editing a job on page 41)
- Move documents between feeders (see Change to an other feeder tray on page 39)
- Link feeders (see Link feeder trays on page 40)
- Start the job or run a test run (see Performing a test run on page 30)

If you tap the [i] button a summary of all information of the job is listed.



The following is a list of symbols or icons and their descriptions.

	is a list of symbols of icons and		T
A4 1x	Main document. Shows the correct document orientation; A is the address.	297mm BCR 1D	Document with reading Shows the correct document orientation; A is the address.
1x A4	Daily mail Feature to manually insert mail-sets one by one into the system.		Enclosure
(i)	Notification Next to this symbol, a message appears, e.g. Sealing liquid low, empty feeder.		
器	Wired LAN connected Network connection is available via a network cable connection.	<del>2</del> 2€	Wired LAN not connected Network connection is not available via a network cable connection.
இ	Wireless LAN connected Network connection via Wi-Fi is available.	<b>*</b>	Wireless LAN not connected  Network connection via Wi-Fi is not connected or out of range.
	Envelope, sealing on Envelopes will be sealed. The symbol shows the correct envelope orientation.		Envelope sealing off Envelopes will not be sealed. The symbol shows the correct envelope orientation. When sealing is off, the flap of the envelope is closed but not moistened.
\$	Feeder linking Linking means that when one feeder is empty, the system automatically starts feeding documents from the other feeder. This symbol at the feeders shows if the feeders are linked.		Change feeder trays Possibility to change from one feeder tray to another.

* Off	Dfc/mail set thickness detection  Double feed control and/or mail set thickness detection has been set to 'off'.  By default the dfc/mail set thickness detection will be set to 'on' and the icon will not be shown.	Fold: V-Fold	Fold type This icon shows what kind of fold type has been set.
Exit: Stacker	Exit setting This icon shows what kind of exit setting has been set.	0	Counter setting Shows on what number the counter has been set.
1x	1x button After tapping this button the system will create an example mail set.	♦ Start	Start button Tapping this button runs the job.
Job list	Job list button After tapping this button the job list screen will be shown.	<b>⊘</b> Stop	Stop button Button to stop the system The current mail set will be completed and the system stops, being empty and ready for a new set.
<b>/</b> Edit	Edit button Gives access for editing a job.	Save	Save button Save the job or changes that have been made to a job.

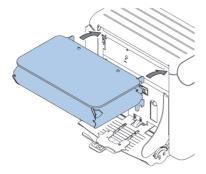
# **MaxiFeeder**

The maxiFeeder is a feeder that can be loaded with a high number of documents. This feeder is intended to be used for Business Reply Envelopes (BRE), but also 'standard' documents up to 148mm/A5 (5.8") length can be processed with it.

For more information on the operation of the maxiFeeder, refer to the topic on loading documents for the maxiFeeder on page 49.



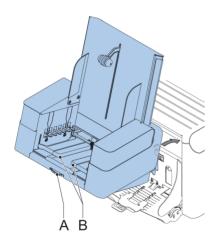
A license is required if you want to use the maxiFeeder.



The system can be equipped with a side exit and catch tray. The side exit can be fitted instead of the envelope receiving tray. The side exit allows a conveyor or a franking system to be fitted in line with the system.

The side exit can also be used with a catch tray to achieve vertical stacking. The catch tray is delivered with the side exit.

# **High Capacity Vertical Stacker**



The High Capacity Vertical Stacker can be used to stack filled envelopes. The vertical stacker can store up to 325 filled envelopes. In case you have a High Capacity Vertical Stacker, install it as follows on your system:

1. Move the stacker as indicated by the arrow.

- Lift the stacker with the suspension hooks over the two rods (upper and lower) and lower it.
- 3. Connect the connector
- **4.** Adjust the side guides with wheel **A** until a margin of 3 to 5 mm is left between the envelopes and the side guides.
- For small envelopes it can be necessary to remove the extensions B from the envelope support.

# **Shut Down the System**

1. Press the [On/Off] button to shut down the system.



In case the system is unresponsive or fails to switch off, press and hold the touch sensitive power button for 10 seconds to switch off the system.

When the system is busy, it completes and inserts the current set, stops and will be shut down.

# 4 Working with Jobs

#### Introduction

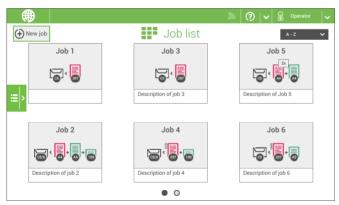
With the system you can process mail sets in the following ways:

- **Using an existing job**: Existing jobs are shown in the Job list and saved via the 'automatic' or 'manual' job creation process. How to use an existing job is described in **Using an existing job** on page 19.
- Automatic job: The system automatically picks one sheet from each filled feeder and processes them into mail sets.
  - The automatic feature is described in About Automatic jobs on page 21.
- Manual job: various settings, not available in an Automatic job, can be set in a
   'manual job. This includes the use of daily mail. Working with manual jobs is described
   in Create a manual job on page 22.

# **Use an Existing Job**

If you want to use an existing job:

- 1. Open the job list.
- 2. Tap the icon of the job you want to use.



- 3. Load the feeders as shown on the display.
- **4.** Tap [1x] to create an example mail set, see Example mail set on page 30.
- 5. Check the example mail set.

6. If example mail set is OK: tap [Start]. If the example mail set is not OK: adjust the address position or envelope stop position or check and re-adjust the job settings.



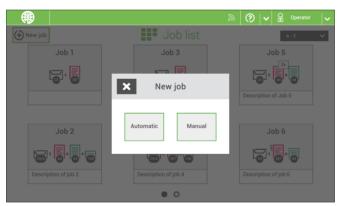
If desired tap the counter button to set the counters. See Counter settings on page 27.

- 7. Tap [Start] to start the job.
- 8. Press the [Stop] button to finish the job.
- 9. Tap [Job list] to return to the job list.

#### **Create a New Job**

To create a new job:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Automatic] or [Manual] to create a new job.



- 3. If you choose 'Automatic' follow the description as can be found in Create an Automatic job on page 21.
- If you choose 'manual' follow the description as can be found in Create a Manual job on page 22.

#### **About Automatic Jobs**

You can save every automatically created job and edit it like any job.

An Automatic job processes mail sets according to the following rules:

- The machine picks one sheet from each filled feeder;
- The picked documents will be folded (if necessary) and inserted into an envelope;
- Only the Double Feed Control (DFC) of the upper feeder will be selected (this is done automatically).

The following features are not supported with Automatic job processing.

- Linked feeders (the option where, if one feeder is empty, the system automatically continues using another feeder);
- Multiple sheet feeding (picking more than one sheet from a certain feeder);
- · Daily mail;
- · Reading functionality;
- No envelopes (use envelopes yes/no).

If you want to use any of these features, you have to use Manual jobs to process the mail set or edit the job afterwards.

#### **Create an Automatic Job**

Proceed as follows if you want to create an automatic job:

- 1. From the Job list menu, tap [New job].
- 2. Tap [Automatic] to start an Automatic job.



- Fill the envelope hopper, load your documents and tap [1x] to create an example mail set.
- 4. Make sure that the address position and the envelope stop position is correct. If not, adjust the address position on page 31 and envelope stop position on page 34.

- If necessary, tap the counter symbol to set the counters. See Counter settings on page 27.
- **6.** Tap [Start] to start the job.
- 7. Tap [Stop] to finish the job.

Tap [Save] if you want to save the settings of the Automatic job to a new job.

#### **Create a Manual Job**

#### Introduction

Creating jobs manually is easy: the user interface guides you through the job definition with clear steps.

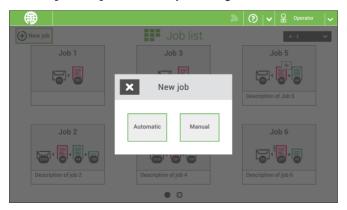
These steps are:

- Define the mail set: envelope type, main document and optional enclosures.
- · Define how to fold the document set.
- Define the exit of the system that should be used for this job.

#### Create a Manual Job

To create a job manually:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Manual] to define the job settings.



Continue with the envelope settings (see Envelope on page 23).

# **Envelope**

1. Tap [Envelope].



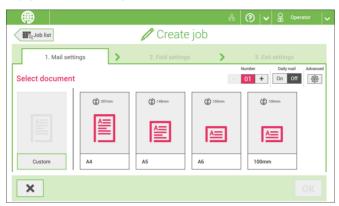
- 2. Select a predefined envelope or create a custom envelope on page 37. Optionally tap [Use envelope] to set the use of envelopes to 'off' if you want to Create a job without the use of envelopes.
- 3. Tap [Sealing] to switch it on or off.



4. Confirm the envelope settings with **[OK]**.

Continue with the main document settings.

1. Tap [Main document].



- 2. Select a predefined document or create a custom document on page 38.
- Change the [Number] to add more than one document from a feeder (multiple sheet feeding).
- 4. Optionally tap Daily Mail to set Daily Mail to 'on' (see also Daily Mail on page 36) or tap [Advanced] to set the DFC settings (refer to DFC Settings on page 24).
- **5.** Confirm the document settings with **[OK]**.

Continue with the enclosure settings.

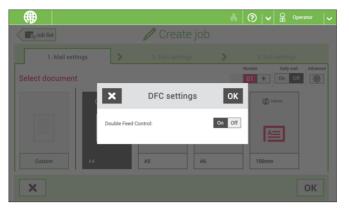
# Switch DFC on or off for feeders

For every feeder you can switch the double feed control (DFC) on or off.

To change the DFC settings:

- 1. Tap the job that you want the change the DFC settings for.
- 2. Tap [Edit].
- 3. Tap the document that you want to change the DFC for.

4. Tap [Advanced].



- 5. Tap Double Feed Control to switch it on or off.
- 6. Confirm the settings with [OK] and continue with the document settings.

#### **Enclosure**

1. Tap [Add enclosure].



Select a predefined document or create a custom document as your enclosure (see Create a custom document) on page 38.

If you want to remove an enclosure from the job, or change the order of the enclosures, see Delete or move an enclosure on page 42.

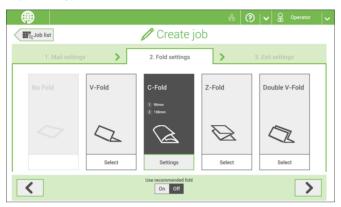
- 3. Change the [Number] for more than one document from a feeder.
- 4. Confirm the enclosure settings with [OK].

Continue with the fold settings (see Fold settings on page 26).

# **Fold Settings**

Default the machine suggests the most logical fold type. This fold type is highlighted. However, you can select other fold types and change their settings.

1. Tap a fold type.



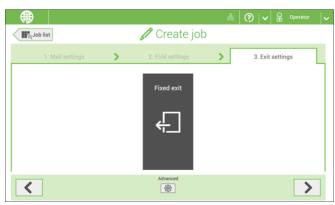
- 2. If necessary, tap [Settings] to change the fold settings.
- 3. Tap [>].

If you want to revert to the machine recommended fold type, switch [Use recommended fold] to On.

Continue with the exit settings (see Exit settings on page 26).

# **Exit Settings**

1. In Exit Settings the Fixed exit is selected by default.



- 2. Optionally tap the [Advanced] button to set the Advanced settings per job (see also Advanced settings on page 62).
- 3. Tap [>].

Finish the job defenition and start the job (see Finish the job definition and start the job on page 29) or set the Counters (see counter settings on page 27).

# **Change the Counter Settings**



The counter settings are job related.

In the Counter submenu you can set the (daily) Job counter, the Stop counter and the Job total counter. The following will be shown in the Counter submenu:

- Job counter (as shown), the daily job counter: number of mail sets that have been processed using this job, after tapping [Start].
- Stop counter/Stop at value: set a number (of processed mail sets) after which the system stops processing. You can set from 5 through 9999. The system will continue processing mail sets until the job counter reaches the stop counter value. The system stops and can be restarted.
  - When the processing of mail sets has been interrupted the system shows how many mail sets have been completed. This is shown at 'completed so far'.
- Job total counter: total number of mail sets that have been processed using this job.

To reset/set the counters proceed as follows:

1. In the Job overview screen tap the counters button.

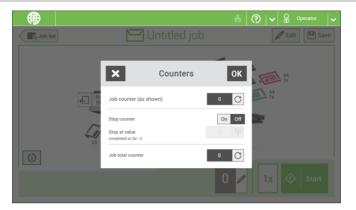


- 2. Tap the reset button for the daily job counter to set it to zero.
- 3. Tap the [on/off] button to set the Stop counter to 'on' or 'off'. If you set the Stop counter to 'on' you can enter the 'Stop at value'. Enter a value from 5 through 9999.

4. Tap the reset button for the Job total counter to set it to zero.



If you set the Job total counter to zero the number history of this job will be lost.



5. Tap [OK] to go back to the job overview screen and tap [Start].

#### Finish the Job Definition and Start the Job

When you have finished the exit settings, the touch screen shows an overview of the job settings.

In this screen you can change the following settings:

- Move documents between feeders (see Change to an other feeder tray on page 39)
- Link feeders (see Link feeder trays on page 40)
- Change the counter settings (see Change the counter settings on page 27)

When you are ready with these settings, proceed as follows:

1. Load the documents as indicated on the Job info screen (refer also to Load the documents on page 46).



- 2. Tap [1x] to create a test mail set (see Test mail set on page 30).
- **3.** If desired, you can save the job (see Save a job on page 41).
- 4. Tap [Start] to start the job.

#### **Create a Test Mail Set**

Before starting an existing job or a new, manual created job, it is possible to create a test mail set.

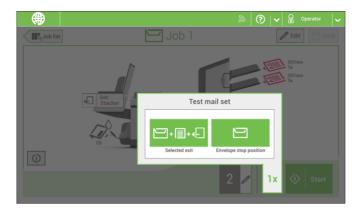
This test run is intended to validate the settings of the Inserting System:

- Check if the address is correctly positioned behind the envelope window.
   See Adjusting the Address position on page 31.
- Inspect and adjust the stop position of the envelope. See Adjusting the Envelope Insert fingers on page 32.
- Check the fold settings for one set. See Fold settings on page 26.

When you tap the [1x] button, you can choose between test mail sets:

- Selected exit: creates one mail set that leaves the system at the defined exit. Use this option to test the complete process.
- Envelope stop position: separates one envelope and transports the envelope to the envelope stop position. Use this option to verify and adjust the envelope stop position.

After a test mail set, the system asks if the mail set is ok or not ok. When you select not ok, you are guided through a wizard that helps you to find the cause.



# **Adjust the Address Position**

If the address on your mail is not correctly positioned behind the envelope window, change the address position as follows:



Adjusting the address position is only possible after creating an example mail set (by using the **[1x]** button).

- 1. Choose a job and tap [1x].
- 2. Tap Mail set not OK if asked if the mail set is correct.
- 3. Tap Address position not correct.
- **4.** Change the address position: slide the position indicator to the correct position.



Tap the green button to create another example mail set or tap [OK] to confirm the settings.

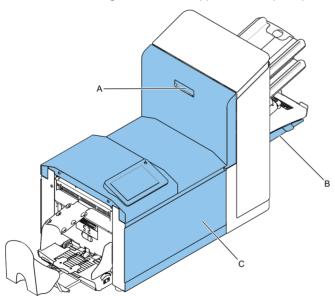
## **Adjust the Envelope Insert Fingers**

To verify that the position of the fingers is correct:

1. Choose a job and tab [1x] (envelope only).



- **2.** Tap the 'Envelope stop position' button.
- 3. Unlock the unlocking lever A of the upper unit and pull up the upper unit.



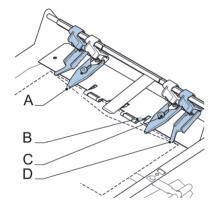
**4.** Tap the arrow to move to the next screen.

**5.** Follow the instructions on screen.



#### If the insert fingers are not correct, adjust the fingers as follows:

1. Loosen the knurled knob **C** on top of each finger.



- 2. Adjust each finger A so that the tip enters about 5 mm (0.2 inch) into the envelope.
- 3. Re-tighten the knurled knob. The fingers can be moved sideways to the desired position.
- Place the outer fingers D about 5 to 10 mm (0.2 to 0.4 inch) from the edges of the envelope.



Check the position of the insert fingers when changing to a different type of envelope.

- **5.** Tap the envelope button on the touch screen to fetch another envelope.
- **6.** Make sure that the finger position is correct. If not, repeat the steps for adjusting the fingers.

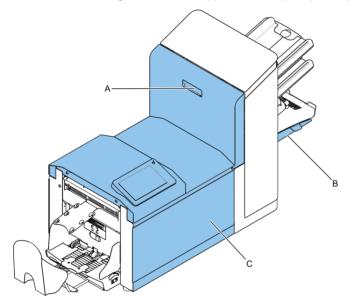
## **Verify the Insert Position**

To verify the insert position:



This adjustment must only be checked in case of problems or when changing the envelope type.

- 1. Choose a job and tap [1x] (envelope only).
- 2. Unlock the unlocking lever A of the upper unit and pull up the upper unit.



3. Follow the instructions on screen.



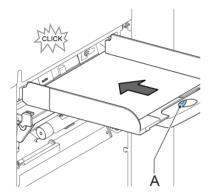
- **4.** Tap the envelope button to fetch another envelope.
- Make sure that the insert position is correct. If not, repeat the steps for adjusting the insert position.

#### **Mail Sets**

## **Adjust the Separation of Special Feeders**

Adjust the separation of special feeders as follows:

1. Push knob A forward until it clicks.



- 2. Turn knob A counter clockwise to open the separation gap.
- Place a document on the feeder tray and slide it into the system until it can go no further.
- **4.** Turn knob **A** clockwise to get resistance.
- Move the document to and fro. The separation is adjusted correctly when a slight resistance is felt on the document. Turn knob A counter clockwise again if the resistance was set too high.
- 6. Pull the knob A back again when ready.

#### Process a Mail Set with BRE or Inserts

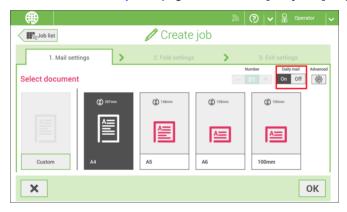
A mail set with BRE or insert consists of a main document (address carrier), a BRE or an insert and perhaps other enclosures. This set is inserted into an envelope.

- 1. From the Job list menu, tap [New job].
- 2. Add the BRE as a (custom) enclosure.
- 3. Follow the job creation process (see Create a manual job on page 22).

## **Process Mail Sets with Daily Mail**

To process mail sets with Daily Mail:

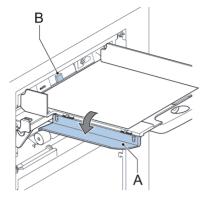
1. See Create a Manual job on page 22 and select [DailyMail] for your Main document.



- 2. Complete the job settings.
- 3. Tap [start] to start the job.

A daily mail switch notification and instruction appears on the screen.

 Turn down the left side guide A of the upper tray. Now you can see the Daily Mail handle B.



- **5.** Move the handle **B** to the right to enable the Daily Mail function.
- 6. Turn side guide A upwards.
- Place the document or document set in the feeder tray. The document or document set will be folded and inserted into the envelope as described in the selected job.
- **8.** Place the next document or document set in the feeder tray. The system will keep running to process the inserted document or document set.
- 9. When finished with Daily Mail, tap [stop] to stop the job.
- **10.** Set the Daily Mail handle **B** to the 'AUTO' position to disable the Daily Mail and enable the automatic document separation.

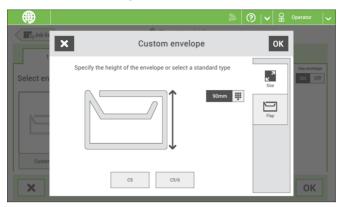
## **Create a Job with Custom Envelopes**



Makes sure that your custom envelopes fit within the specifications (see Envelope Specifications on page 116).

- Create a manual job as explained in Create a Manual job on page 22 and select envelope.
- 2. Tap [Custom].

3. Enter the envelope height.



- 4. Tap the [Flap] tab if you use open flap envelopes.
- 5. Select if you want to feed envelopes with flaps up (On) or with flap down (Off).
- **6.** Tap **[OK]** to save and close the envelope settings.
- Complete the Fold Settings and Exit Settings to complete the job and tap [Save] to save the job.

Follow the instructions as described in 'Create test mail set' on page 30.

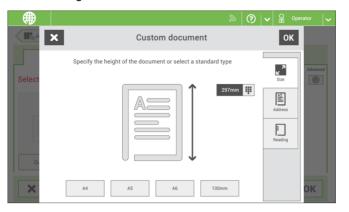
#### **Create a Job with Custom Documents**



Makes sure that your custom documents fit within the specifications (see Document Specifications on page 115).

- 1. Create a manual job as explained in Create a Manual job on page 22 and select a custom document as your main document or enclosure.
- **2.** Tap **[Custom]** to create a custom document.

3. Enter the height of the document.



- 4. Confirm the document settings with [OK].
- Complete the Fold Settings and Exit Settings to complete the job and tap [Save] to save the job.

Follow the instructions as described in 'Create a test mail set' on page 30.

## **Change to Another Feeder Tray**



You cannot change the order of the documents in the mail set by changing feeders. If you want to change the order of the mail set, see Delete or move an enclosure on page 42.

If you want to move the main document or enclosures to another feeder tray:

- 1. Select a job from the Job list.
- Tap the document that you want to move to another feeder tray.All available feeder trays are marked with a dotted box.



- 3. Tap the dotted box of the feeder tray where you want to move your document to.
  The new feeder tray is selected for feeding of the document.
- 4. Tap [Save] to save the feeder tray selection to the job.

## **Link Feeder Trays**

Link feeder trays as follows:

- 1. Select a job from the Job list.
- 2. Tap the feeder tray that you want to link to another feeder tray.

The link symbol appears.



3. Tap the link symbol.

The figure shows an example of linked feeders.



**4.** Tap **[Save]** to save the link to the job.

When you want to un-link the feeders, tap the feeder trays and tap the un-link symbol.

#### Edit a Job

To edit an existing job:

1. From the Job list menu, select a job you want to edit.



2. Tap [Edit].

When you tap [Edit], you enter the guided job flow that enables you to make the desired changes.

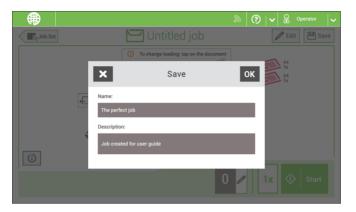
- 3. Make the changes you want to make. When you completed the job programming, tap [Save] to save the changes.
- 4. Tap [1x] to make sure that the Insert Position and Address Position are correct (see Verifying the Insert Position on page 34 and Adjusting the Address Position on page 31).

#### Save a Job

When you have created a new job or edited a job, save the job as follows:

- 1. After you have completed the job definition, tap [Save].
- 2. Enter the job name.

3. If necessary, add a description to the job. The description is visible in the job list.



4. Tap [OK] to save the job.

The job is added to the job list.

#### **Delete or Move an Enclosure**

If you want to delete an enclosure in your job or change the order of the enclosures, proceed as follows:

- 1. From the Job list menu, select a job you want to edit.
- 2. Tap [Edit].
- 3. Tap and hold the enclosure you want to move or delete.



Now drag the enclosure to an other position. Or tap the waste bin to delete the enclosure from your mail set.

**4.** Tap the arrow buttons [>] to pass the other job definition steps and close the job editor.

- **5.** Tap **[Save]** to save the changes.
- **6.** Tap **[1x]** to make sure that the Insert Position and Address Position are correct (see Verifying the Insert Position on page 34 and Adjusting the Address Position on page 31).

## Copy a Job

To copy existing job settings to a new job:

1. Tap and hold the job in the Job list menu.

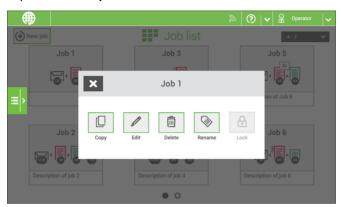


- 2. Tab [Copy].
- **3.** Enter the name of the new job and tab [**OK**].

### **Delete a Job**

To delete an existing job:

1. Tap and hold the job in the Job list menu.



- 2. Tap [Delete].
- 3. Tap [OK] to confirm.

#### Rename a Job

To rename a job:

1. Tap and hold the job in the Job list menu.



- 2. Tab [Rename].
- 3. Enter the name of the new job and tab [OK].

### Lock a Job

To lock an existing job:

- 1. Log on as supervisor.
- 2. Tap and hold the job in the Job list menu.



- 3. Tap [Lock].
- 4. Tap [OK] to confirm.

The job shows a lock in the job list. If the supervisor is logged on, the lock is open. If the operator is logged on, the lock is closed. The operator cannot edit, delete or rename the job, when the job is locked.

# 5 Loading the System

### **Document Orientation**

The touch screen shows how to load documents and envelopes into the feeders. The table shows the meaning of the symbols:

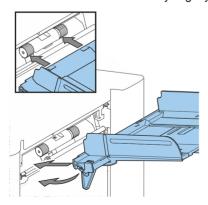
THE P	Address carrier face up and leading (top address)
	Address carrier face down and trailing (top address)
TIIIII I	Enclosure face up
	Enclosure face down

## **Document Feed Trays**

## **Install the Document Feed Trays**

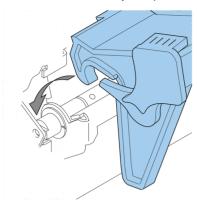
Place the document feeder trays in position:

1. Hold the document feeder tray slightly inclined as shown in the figure.



2. Place the front end of the document feeder tray underneath the two black rollers.

3. Move the document feeder tray upwards (lifting the black rollers), until it is possible to 'hook' the feeder tray into place.

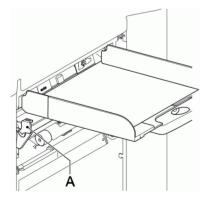


- **4.** Move the document feeder tray towards the machine and move the hooks over the mounting points (on both sides).
- 5. Let the document feeder tray rest on the machine.

## **Adjust the Side Guides**

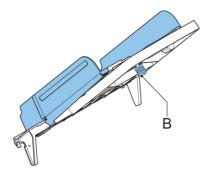
To adjust the side guides it is best to remove the document feeder tray from the feeder as follows:

1. Push handle A downwards.



2. Lift the document feeder tray upwards to unhook it and then pull it out from the feeder.

3. Loosen the knob B half a turn.



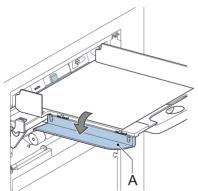
- 4. Grab the side guides in the middle and push them apart as far as possible.
- 5. Put a small stack of documents between the side guides.
- 6. Grab the side guides in the middle and push them towards the documents. The space between the side guides and the documents should be such that the documents have just enough play to move freely.
- 7. Re-tighten knob B.
- 8. Remove the stack of documents.
- Replace the document feeder tray (see Installing the Document Feeder Trays on page 46).

#### **Load Documents**

Fill the document feeder tray as follows:

1. Open the left-hand side guide **A** by turning it downwards.

The feed rollers will automatically be lifted.



2. Place a stack of documents between the side guides.

3. Turn the left side guide upwards again.

### **Document Separation**

The term 'Document separation' refers to the adjustment required for separating the upper document from the rest of the documents in the stack. This prevents pulling too much documents from the stack at the same time.

The document separation for the automatic feeders is set automatically; there are no manual adjustments needed.

Feeders 3st can be special feeders. The document separation for special feeders must be adjusted manually. While special feeder trays fit in all positions, adjusting the separation is only possible when they are fitted on position 1 and 2.

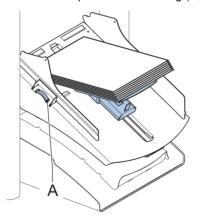
To adjust the separation of special feeders follow the instructions as described in Adjust the Separation of Special Feeders on page 35.

#### maxiFeeder

## Adjust the maxiFeeder Side Guides

Adjust the side guides:

**1.** Take a stack of documents/BREs and place them in the feeder tray. BREs with flap down and leading (top side pointing to system).



2. Adjust the side guides by turning the thumb wheel **A** such that the documents/BREs just fit and can move without resistance.

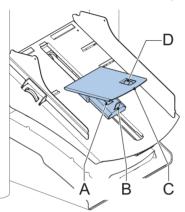
Too much play causes skewing.

## **Adjust the maxiFeeder Document Separation**

When the maxiFeeder is used at an automatic separation feeder, the separation is set automatically.

The maxiFeeder can also be used on a feeder position with a manually adjusted separation. To adjust, proceed as follows:

1. Remove the document feeder trays 2 and 3.



The lowest feeder is feeder 1.

- Squeeze the two blue handles A and B and shift the feeding plate C as far as possible to the front.
- Push knob D forward until it clicks.
- Place a document/BRE on the feeder tray and slide it in the system till the leading edge is not visible anymore. Turn knob D counterclockwise if the separation is set to narrow.
- 5. Push the document/BRE between the rollers.
- **6.** Turn knob **D** clockwise to get more resistance and counterclockwise if the separation is set to narrow.
  - The separation is adjusted correctly when a slight resistance is felt on the document/BRE.
- 7. Pull knob **D** back when ready.
- 8. Replace the document feeder trays 2 and 3.

## **Load Documents (maxiFeeder)**

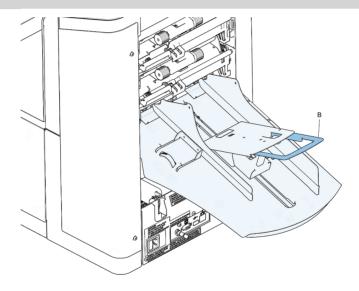


When loading the maxiFeeder, make sure that the document/BREs are positioned parallel in relation to the feeding plate assembly to ensure correct feeding.

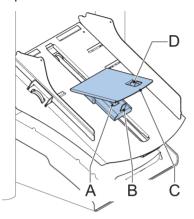
The feeding plate assembly will be shifted up automatically (when the system starts processing) until documents/BREs are underneath the rubber paper pullers.



In case of long documents, use the feeding plate extension  $\ensuremath{\mathsf{B}}$  to support the documents.



1. Squeeze the two blue handles A and B.

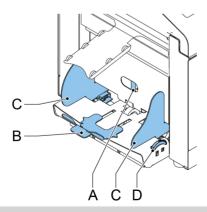


- 2. Shift the feeding plate assembly **C** to the rear position.
- Loosen the stack of documents and place them in the feeder tray. BREs with flap down and leading (top side pointing to system).

## **Loading Envelopes**

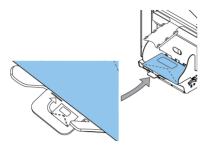
Before you load the envelopes, make sure the envelope separation and side guides are correctly set. Proceed as follows:

1. Rotate thumb wheel **D** to move the side guides **C** apart.

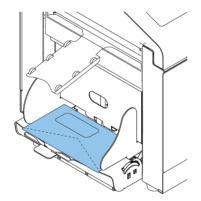


If the distance between the side guides is too large, the envelopes will twist sidewards, when transported into the machine.

2. Turn knob A counter-clockwise as far as possible.



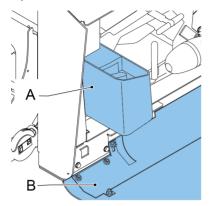
- Slide an envelope (with closed flap) between the rollers in the machine and turn knob
   A clockwise until a slight resistance is felt when moving the envelope in and out of
   the machine.
- When the resistance is too high, turn knob A counter-clockwise, until only a slight resistance is felt.
- **5.** Place the bottom envelope between the rollers (flap down and trailing bottom side of the envelope pointing to the machine).



- **6.** Loosen the stack of envelopes, and place the stack on top of the bottom envelope.
- 7. Shift envelope support **B** in or out, so that the flap side of the envelope is lifted approximately 20 mm (0.8").
- **8.** Turn envelope support **B** so the weight of the envelopes is evenly distributed on both sides.

## Fill the Sealing Liquid Reservoir

1. Open the front cover B.



- 2. Fill the reservoir A to the "Max" lip with sealing liquid.
- 3. Close the front cover B.

Before starting the job, wait approximately 5 minutes for the brushes to moisten or use moistened brushes. For instructions on the installation of brushes, see the User Guide, section Clean and replace brushes.

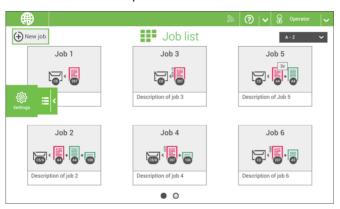
# 6 Settings menu

## **Open the Settings Menu**

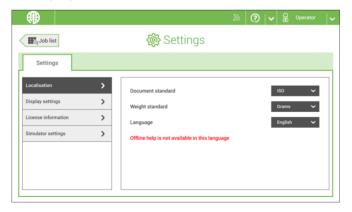
In the settings menu for the operator it is possible to edit the display settings and to set the localisation.

If you want to view or edit any of the Operator Settings:

1. Go to the Job list and tap the side menu on the left side and select [Settings].



2. Tap [Localisation] if you want to change the document standard, weight standard or the language.



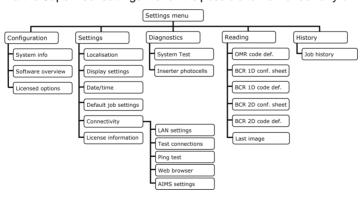
- 3. Tap [Display settings] if you want to:
  - set the 'Key' click to on/off
  - set the Volume
  - set the Backlight
  - set the BrightnessTo set the backlight and brightness, a test pattern is available as a reference.



For more information on Open source licenses, see License information on page 66.

## The Settings Menu Supervisor

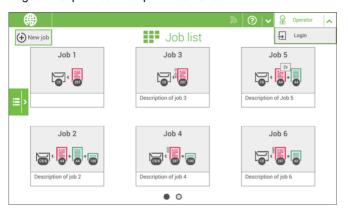
Supervisor Settings are all settings that can be found under the Settings Menu when logged in as supervisor (pin code 2546). The following flowchart shows which subjects are available via the Supervisor settings menu. It is possible to view or edit any of the Supervisor Settings.



## Open the settings menu Supervisor

If you want to view or edit any of the Supervisor settings proceed as follows:

1. Login as Supervisor with pin code **2546**.



2. Go to the Job list and tap the side menu on the left side and select [Settings].



## Configuration

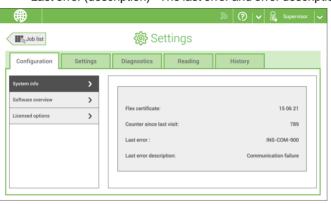
### Configuration

The Configuration menu contains the configuration information settings for the system.

#### **System Info**

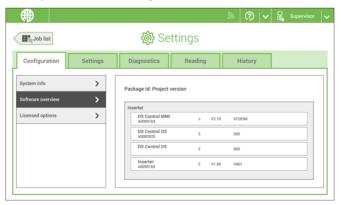
The System info part of the Configuration menu shows the following information:

- · Flex certificate this option is used for reading
- · Counter since last visit the counter value since the last service visit
- Last error (description) The last error and error description generated by the system



#### **Software Overview**

The Software overview part of the Configuration menu shows the versions of the software that is present in the total system.



#### **Licensed Options**

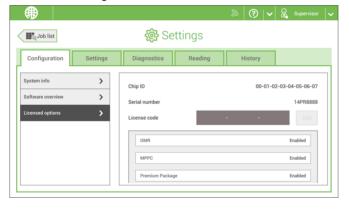
The Licensed options part of the Configuration menu shows the following information:

- Chip ID
- Serial number
- · Installed options

The installed options are enabled with license codes. These license codes, together with the identification number of the machine enable the relevant options. The enabled and available software options are displayed in this screen. Contact your dealer for information about these license codes.

#### Examples of licensed options are:

- · Remote assistance
- · Online help
- · Advanced/Basic reading
- OMR 1 track
- BCR 1D
- BCR 2D
- OCR
- · Flex reading



## **Add a Licensed Option**

To add a licensed option:

1. In the Configuration, Licensed options screen, enter the license code.



2. Tap [Add]. The system verifies the license key.

If the license key has been verified successfully, the option is added to the system and can be used.

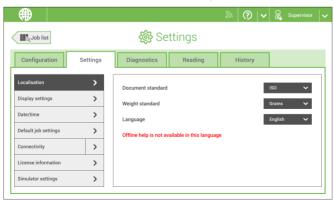
## **Settings**

#### **Settings**

The Settings menu contains the configuration settings for the system.

#### Localisation

Tap [Localisation] if you want to change the document standard or the language.



When you need a keyboard to enter e.g. a job name, you get a special keyboard in case of Russian, Czech and Katakana. But the keyboard has always a button to switch back to the English keyboard.



**Display Settings** 

See the settings menu for the operator on page 55.

#### Date-time

Tap [Date/time] to set the:

- Date
- Time
- Date format; you can choose between three format to show the date: dd-mm-yyyy, mm-dd-yyyy or yyyy-mm-dd
- Time format; you can choose between a '12 hours' notation or a '24 hours' notation



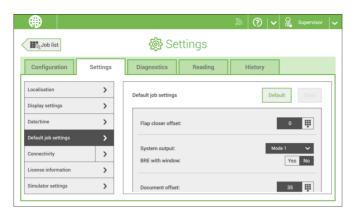
#### **Default Job Settings**



Job settings normally will be changed by a service engineer only. Therefore first consult the service organization before you change any settings. Changes to the job settings can result in malfunctioning of jobs.

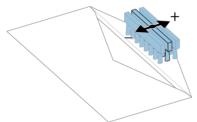


You can also define the job settings per job. Select a job from the Job list, tap Edit, navigate to the Exit settings, and tap Advanced on page 26.



The default job settings part of the Settings menu covers settings that improve the processing of jobs:

• Flap closer offset: to improve the sealing of specific envelopes you can delay or advance the moment of sealing. You enter the number of pulses. A minus value means the sealing is advanced, a plus value means the sealing is delayed. You can enter a number between -20 and 20.

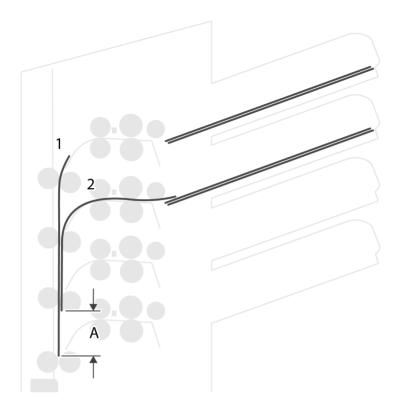


• System output: mode 1 mode 2

Mode 1 focuses on the versatility of paper parameters (paper thickness; document length), i.e. correct operation under even extreme paper conditions. Mode 2 is the default mode, and focuses on high speed. Use Mode 1 with a paper thickness of 65 g/m2 or less, a document length of 12 inch (305 mm) or higher, and for situations

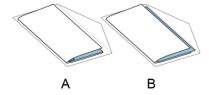
where Mode 2 is not functioning properly. In all other cases use Mode 2.

Document offset (A in the figure): the extend to which documents are not overlapping
in the vertical transport. In the vertical transport of documents fed by the various
feeders, the documents are partially overlapping each other. This to make sure that
the documents are properly aligned in the collator area. The default value is 35
mm (1.4 inch). The document offset can be varied between 20 mm (0.8 inch) and 75
mm (3.0 inch).



• BRE offset: in the case of offset is "yes", the last document that was added to the set is shifted from the rest of the set (offsetting, see below).

Explanation of BRE offset: if a BRE is longer than the set fold but shorter than the envelope height, this BRE can get folded (A in the figure). Under certain conditions (see below) you can prevent the BRE from being folded. In the case of offset "yes", the BRE is held back during a certain distance (B in the figure). This means that the trailing edge of the BRE leaves the collator last. The document is not folded. During the insertion into the envelope the documents of the set are aligned.



#### The conditions are:

- · No multi-feed is used for the BREs.
- The document directly under the BRE must have a height of at least 60 mm (2.4 inch) more than the BRE.
- The height of the BRE is more than the set fold length.
- The folding mode is either V-fold or C-fold (no Z-fold).
- The BRE must be shorter than the envelope height.

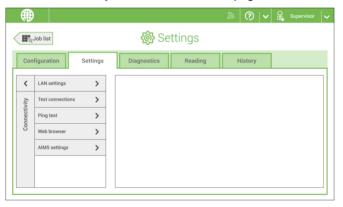
The whole BRE offset is based on friction between documents within a set. Therefore it is necessary to make use of these conditions to reduce the risk of bad transporting, folding and inserting.



It is possible to use the BRE offset for a BRE and an enclosure (card) in one set. The extra condition is that this enclosure is equal to or smaller than the set address fold and should be placed direct underneath the BRE in the set.

#### Connectivity

See Connect the system to the internet on page 72.



#### License information

License information shows information on the open source software that is used in the system.



## **Diagnostics**

### **Diagnostics**

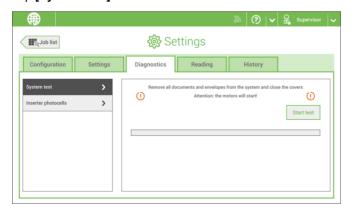
The diagnostics menu contains the basic diagnostics functions available for a supervisor.

## **System Test**

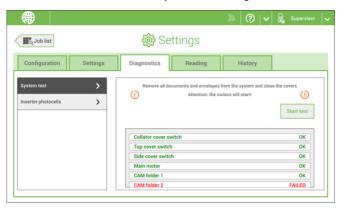
Use the [System test] to check if all motors, clutches and sensors are correctly connected. The test briefly activates the actuators and clutches and measures the current.

To run a system test:

- 1. In the Settings menu, tap the [Diagnostics] tab.
- 2. Tap [System test].



- **3.** Remove all documents and envelopes and close all covers before starting the diagnose.
- 4. Tap [Start test].
- 5. When the test is finished, the Status report is shown, showing the status of all tested items. If the tests fail, contact your service organization.



#### Inserter photocells

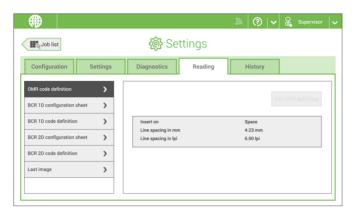
When too much paper dust is built up at the sensors a warning message will be displayed. To check the conditions of the photocells or to calibrate them follow the instructions as described in Calibrate photocells on page 99.

### Reading

#### Reading

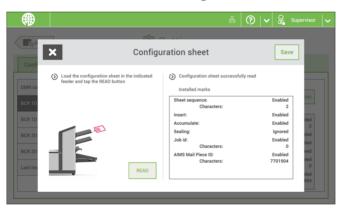
The reading menu contains the configuration items for the reading functions. Because reading is optional, this menu is only available when there is at least one reading license present. For more information on the reading option, see Reading on page 77.

#### **OMR Code Definition**



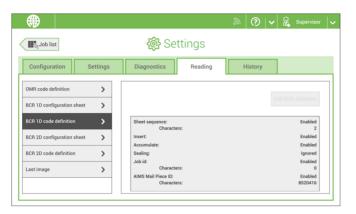
The Reading OMR code definition screen shows the configuration of the system for OMR. For every OMR code option, it shows if it is on or off. If it is on, the screen shows information on what the system does, when it reads a mark or no mark.

### **BCR 1D Configuration Sheet**



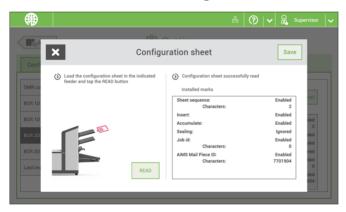
The Reading BCR 1D configuration sheet allows you to read a configuration sheet. The result is visible in this screen, but also in the BCR 1D code definition screen. See Reading a configuration sheet on page 90.

#### **BCR 1D Code Definition**



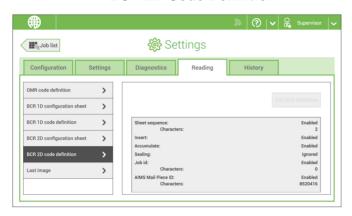
The BCR 1D code definition screen shows only information when a configuration sheet is read. It shows which codes are enabled and how they work.

#### **BCR 2D Configuration Sheet**



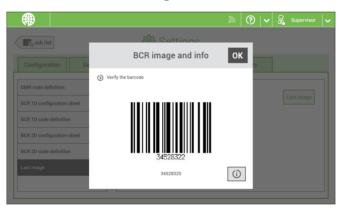
The Reading BCR 2D configuration sheet allows you to read a configuration sheet. The result is visible in this screen, but also in the BCR 2D code definition screen. See Reading a configuration sheet on page 90.

#### **BCR 2D Code Definition**



The BCR 2D code definition screen shows only information when a configuration sheet is read. It shows which codes are enabled and how they work.

### **Last Image**



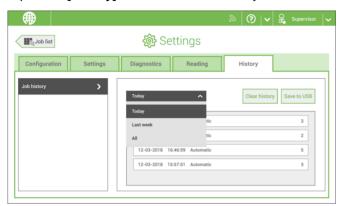
The Last image screen shows the result of the last code that the system read. The figure shows an example of the image of an OMR code. You can use this image to see if the read code fits within the reading window.

When you click on the Information button of an image of OMR code, the screen shows a graphical representation of the marks read from the last OMR document (oscilloscope function). It shows the time-dependant OMR output voltage.

### **History**

The History screen shows an overview of the jobs run.

1. Tap on the [History] tab to view the Job history.



2. Tap on the [Today] pull down button if you want to view the jobs that are run 'Today', 'Last week' or 'All'.

The history is displayed on the touch screen. With [Save to USB], you save the history in CSV format to a USB drive.

### 7 Connect the System to the Internet

### **Options for Connection**

Connect the system to the internet in one of the following ways:

- Wired connection with the gigabit ethernet connection:
  - Connect with DHCP (Automatic IP address)
  - Manual Configuration
- · Wireless connection:
  - Search for SSID
  - Manually configure SSID

In all cases, you can use proxy for the connection.

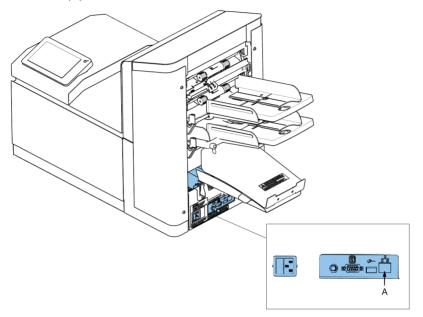


Log on as Supervisor to complete this procedure.

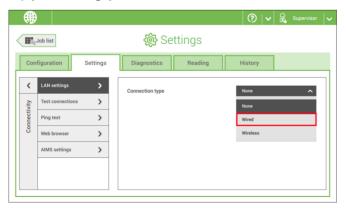
### **Set up a Wired Connection**

Set up a wired connection as follows:

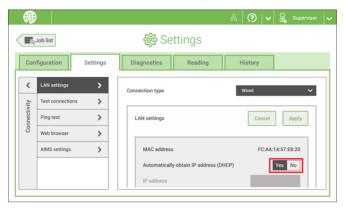
1. Connect the system to a LAN with a network cable. The figure shows the LAN connector (A).



- 2. Open the supervisor settings menu.
- 3. Tap the Settings tab, [Connectivity].
- 4. Tap [LAN settings].



5. Select **Wired** from the **Connection type** pulldown menu.

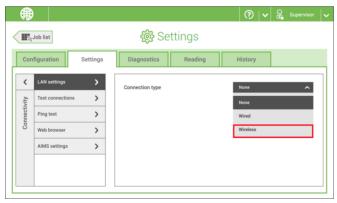


6. Set Automatically obtain IP address (DHCP) to Yes or No. If Yes, the system connects automatically to the LAN. If No, set up a connection manually. Enter the necessary details to setup a manual connection.

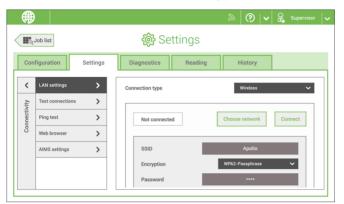
### **Set up a Wireless Connection**

Set up a wireless connection as follows:

- 1. Open the supervisor settings menu.
- 2. Tap the Settings tab, [Connectivity].
- Tap [LAN settings].

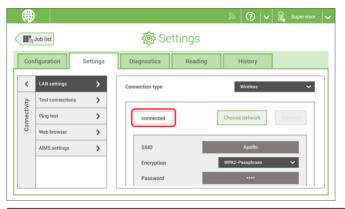


4. Select Wireless from the Connection type pulldown menu.



- 5. Choose if you want to enter the SSID manually or if you want to search for a wireless network. If you want to search for a network, tap [Choose network].
- **6.** When you have entered the network details or selected a network from the search, tap [Connect] to connect to the network.

When the system connected successfully to the network, the screen shows Connected.



### **Test the Connection**

When you have connected to a network, test the connection as follows:

- 1. Open the supervisor settings menu.
- 2. Tap the Settings tab, [Connectivity].
- 3. Tap [Test connections].



4. Tap the [Test] button.

The system tests the IP addresses that are defined at the LAN settings. If the result is 'Not OK', make sure that the settings are correctly defined.

### 8 Reading

### Introduction

### **Code Types**

The reading option allows the system to read special codes that are printed on the documents. The code contains information about the processing of the documents.

The system can read the following code types:

- OCR: Optical Character Recognition; the system can scan an area of the document for page number information in the page "n of m" (n/m) format
- BCR 1D: One dimensional barcode
- · BCR 2D: Two dimensional barcodes
- OMR: 1-track Optical Mark Recognition
- Flex 1-9: Optional translation to support non standard OMR and BCR coding

Depending on the settings, the code tells the system if:

- The document set is complete
- · Enclosures must be added to the set
- The system must stop
- The set is complete (no pages are missing)
- The envelopes are transported to the side exit or to the stacker

The sheets with the printed code are placed in a feeder. Depending on the programmed code, the other feeders can be used as selective feeders to add enclosures. In case of a Z-fold, the address has to be printed on the last page of the set (see Document orientation for the code position). With the other fold types, the first sheet of a set always contains the address. A full length code is printed on every sheet of a set. The code must appear at the same location on every page regardless of the actual code length.

The code on the last sheet of the set contains the insert instruction (unless reverse reading is used, see Reading settings, Reverse reading). The other sheets carry the accumulate instruction. If the "page n of m" code is used with BCR or OCR, the set will be inserted when n equals m.

### **General Requirements for Printing Codes**

If you print documents for reading:

- Make sure the ribbon or toner quality is sufficient.
- · Print the code in black on white background.
- · Codes on the same sheet must have equal intensity.
- Print the code at the same position on every sheet.
- Be aware of "background noise". The reading function can be disturbed by: color changes on the form, background design and a logo or copy on the opposite side of the sheet that will bleed through.
- For matrix printers near letter quality (NLQ) printed characters are preferred to obtain maximum blackness (double strike).



For more information on how to print a reading code on your document, contact your service organization.

### **OCR Code Description**

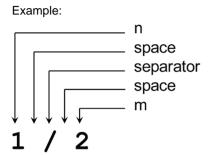
With OCR page n / m (page n of m) you can print human readable characters on your mail set, which can be read by the system, to insert your mail set. The system can recognize the characters in the so called "n / m" format.

If the value of n is smaller than the value m the sheet will be accumulated, if the value of n is the same as the value of m the set will be inserted; m is the total number of pages and n is the current page.

Some specifications for OCR page n / m:

Supported fonts / font size	Times New Roman, Arial, Helvetica, Courier. Italic text will not be supported, <b>bold</b> not recommended.
Character size	12 point dotpitch
Supported layouts	n / m (n,space,/,space,m) Both n and m need to be in the text, n first.
Print Quality	600 dpi (preferable)
Clear Area	15 mm (minimal), around
Color Background	White
Print drift	+/- 2 mm (max.)

Positions	Only one region of interest per job
	Only horizontal text (portrait) supported
	All text on the same line



**Trailing** 

>7 mm



### **BCR Code Description**

Bar codes are used for mail sets that are processed in Document Systems. The bar codes tell the system if:

- The document set is complete
- · The envelope should be sealed
- · Enclosures should be added
- Etc.

Barcode can be printed vertically and horizontally. Two types of barcodes are supported, 1D and 2D barcodes (depending on installed licenses).

### Supported 1D barcodes

Code 39



Interleaved 2 of 5



- Minimum line thickness of a bar: 0.25 mm (0.01 inch)
- The thickness ratio of thick bars versus thin bars: 2.2
- Minimum width of the barcode: 5 mm (0.2 inch)
- The white area in the picture shows the limits where the code can be printed



Code 128 is not supported. It may work but it is not recommended because it is very sensitive to speed variations.

### Supported 2D barcodes

#### **Datamatrix**



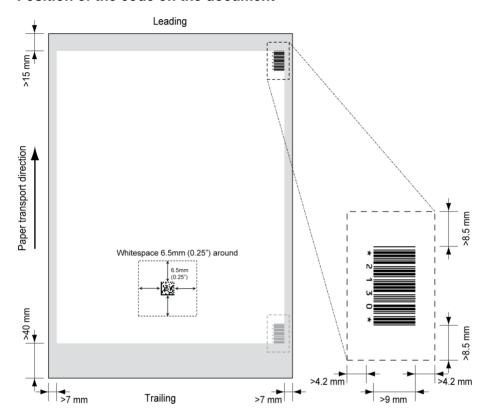
- Minimum cell size 0.35mm (0.014")
- Label size 30mm (1.18") square max
- Preferred print quality 600dpi
- Print drift from page to page +/-2mm max
- Colour background: White
- Minimum white space 6.5mm (0.26")
- Datamatrix can be read in all directions.

# PDF 417

- Bar width 0.35mm (0.014") min
- Preferred print quality 600dpi
- Print drift from page to page +/-2mm max
- Colour background: White
- Minimum white space 6.5mm (0.26")

Printing contrast The label must be strongly printed in black on white background for maximum contrast. Other light backgrounds may be acceptable, subject to test.

#### Position of the code on the document



### **BCR** license types

There are two BCR license types:

- Basic
- Advanced

#### **BCR** basic license

For the BCR basic license the following functions are supported:

- Page N of M: as long as N is below M, the document set is not complete. As soon as N=M, the set is complete and will be inserted into an envelope.
- Insert/Accumulate: defines when a document set is complete and must be inserted into an envelope.

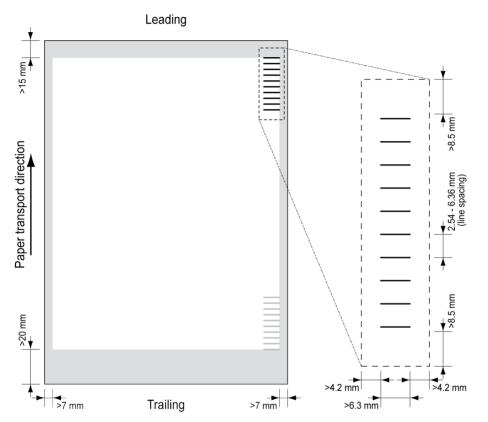
At least one basic commands is required. Page N of M can be used in combination with Customer ID as an integrity check.

#### **BCR** advanced license

For the BCR advanced license the following functions are supported:

- The basic functions (page N of M, insert/accumulate).
- Sheet sequence Every sheet has a number, regardless of the document set it is part of. If a sheet is missing, an error is generated.
- Group sequence Every document in a set has the same group number. If one
  document set is missing, an error is generated.
- Divert (Divert & Continue) The set will be diverted and the system continues.
- Stop (Divert & Stop) The set will be diverted and the system stops indicating error (FT1-RE1-000 Reading stop Stop mark read).
- Selective feed If the system reads the command, an enclosure from the enclosure feeder is added to the set.
- Sealing control Determines if envelopes are sealed or not.

#### Position of the code on the document



Minimum line thickness of a mark: 0.2 mm (0.008 inch).

Default the first mark from the top is set to: 100 mm (3.9 inch). This parameter is set in the job settings.

The code must have a consistent number of marks on every page.

The white area in the picture shows the limits where the code can be printed.

### **OMR license types**

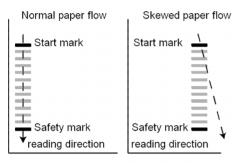
There are two OMR license types:

- Basic
- Advanced

#### **OMR** basic license

For the OMR basic license the following functions are available:

- · Start mark: indicates the start of the code.
- Insert/Accumulate: defines when a document set is complete and must be inserted into an envelope.
- Parity check: by adding a parity mark the reading code can be checked. The sum of the marks must be even.
- Safety Mark: is used as an extra security (only 1-track OMR). With skewed paper
  the reading head can miss part of the reading code. In these situations the safety
  mark is not read, and the system will give an error. The safety mark also indicates
  the end of the reading code. This mark must always be present on the document if
  it is part of the code definition.



The minimum code is one mark in one line (insert). However for reliability it is advised to use at least 2 marks. The first line is the start mark. A mark printed on the second line means insert. No mark on the second line means accumulate.

#### **OMR** advanced license

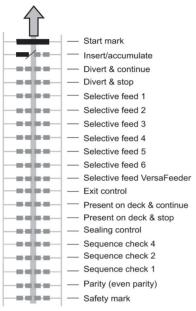
For the OMR advanced license the following functions are available:

- The basic functions (Start, Insert, Parity, Safety).
- Stop (Divert & Stop) The set will be diverted and the system stops indicating error (FT1-RE1-000 Reading stop Stop mark read).
- Selective Feed (feeder 1-3) If the system reads the command, an enclosure from the enclosure feeder is added to the set. This function is printed on the last sheet of a set.
- Sealing control Determines if envelopes are sealed or not. If a mark is printed, the envelope is not sealed.
- Sequence Check Sheets in a stack can accidentally get out of sequence or can be
  missing. This can be detected by the sequence check. Each sheet has a binary code
  that is a part of the reading code. Depending on the application one, two or three
  marks are used by sequence check.

### **OMR** general remarks

#### General remarks:

 In case of OMR the marks must always be used in the sequence as shown in the figure.



- If a function is suppressed the following function will move upwards one line.
- The mark definition is a service setting.

### An Example of OMR Code

In the figure the legend for the following example is shown. In this example, a set of 8 sheets with one selective feed and three sequence check marks is shown.



Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6 Sheet 7 Sheet 8

- The first position is used for the start mark which must be printed on every sheet.
- The second mark position is used for the insert/accumulate command. A printed mark means insert, no mark means accumulate. Therefore the mark is printed on the last sheet of the set.
- Position 3 is reserved for selective feed from the enclosure feeder. Print a mark on position 3 when a selective feed from the enclosure feeder is required. The marks are printed on the last sheet of the set.
- Position 4, 5 and 6 are used for the sequence check marks. In this case a three mark sequence check is used.

### Flex Reading Code Description

With "Flex reading" also non-standard codes and alternative document handling algorithms can be recognized. Flex reading can be activated by a system specific license code and by a customer specific setting that is saved in a physical dongle. With Flex three types of reading can be supported:

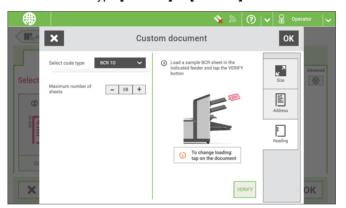
- OMR
- BCR 1D
- BCR 2D

Depending on the license up to 9 Flex definitions can be used on the system. Creating a Flex job is similar like creating a OMR / BCR reading job.

#### Create a BCR Job

To create a job with BCR:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Manual] to define the job settings.
- 3. Select an envelope.
- 4. Tap [Main document].
- 5. Tap [Custom].
- **6.** Enter the document size or select a standard type.
- 7. Tap the [Reading] tab.
- 8. Select the code type [BCR 1D] or [BCR 2D].



- 9. Load a sample document in the feeder tray as indicated.
- **10.** Tap [Verify] to find the barcode(s) on the sheet.
  - If multiple barcodes are found you can select the correct barcode from the list.
- 11. Tap [OK] and follow the remaining steps to complete the job.
- **12.** When you completed the job creation, tap **[Save]** to save job.

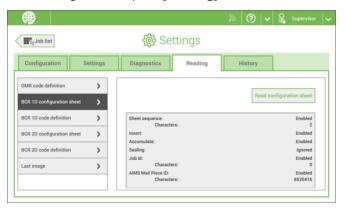
If required the maximum number of sheets can be reconfigured. Refer to Reading Settings on page 94 for more details on how to change these settings.

### **Read a Configuration Sheet**

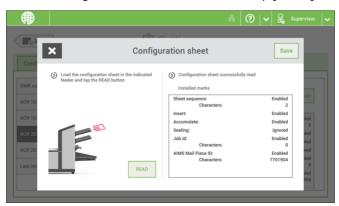
If you want to set the code definition for BCR, use a BCR configuration sheet. The configuration sheet function is available when you are logged on as a supervisor on page 5.

To read a configuration sheet:

- Go to the settings menu for supervisor, see Opening the settings menu (supervisor) on page 57.
- 2. In the settings menu, tap the [Reading] tab.



- 3. Tap [BCR 1D configuration sheet] or [BCR 2D configuration sheet].
- 4. Tap [Read configuration sheet].
- 5. Load the configuration sheet as indicated and tap [READ].



**6.** Tap **[Save]** to save the new barcode definition.



After reading a configuration sheet, jobs with BCR reading might have changed. These jobs are marked with an exclamation mark, verify the job settings before running the job.

You can also read a configuration sheet when you create or edit a BCR job. The function is available in the side menu.

#### Create an OMR Job

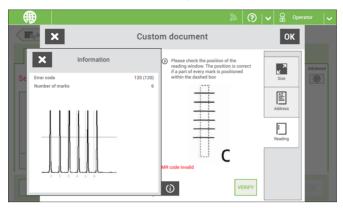
To create a job with OMR:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Manual] to define the job settings.
- 3. Select an envelope.
- 4. Tap [Main document].
- 5. Tap [Custom].
- **6.** Enter the document size or select a standard type.
- 7. Tap the [Reading] tab.



- 8. Select the code type [OMR].
- Configure the location of the OMR marks by setting the offset of the top and left side of the sheet.
- **10.** Load a sample document in the feeder tray as indicated.
- 11. Tap [Verify] to read an example sheet to check the correct reading of the OMR marks.
- **12.** If necessary adjust the position from top and from left side. Verify again with a sample sheet.

13. Tap the information button to verify the read OMR marks.



- 14. Tap [OK] and follow the remaining steps to complete the job.
- 15. When you completed the job creation, tap [Save] to save job.

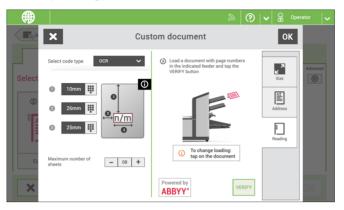
If required the maximum number of sheets can be reconfigured. Refer to Reading Settings on page 94 for more details on how to change these settings.

#### Create an OCR Job

To create a job with OCR:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Manual] to define the job settings.
- 3. Select an envelope.
- 4. Tap [Main document].
- 5. Tap [Custom].
- **6.** Enter the document size or select a standard type.

7. Tap the [Reading] tab.



- 8. Select the code type [OCR].
- 9. Configure the location of the n / m characters by setting the offset of the top and left side of the sheet [1] and [2].
- 10. Configure the width of the n / m characters [3].
- 11. Load a sample document in the feeder tray as indicated.
- **12.** Tap **[Verify]** to check if the page n / m characters are read successfully.
- 13. Tap [OK] and follow the remaining steps to complete the job.
- **14.** When you completed the job creation, tap **[Save]** to save job.

If required the maximum number of sheets can be reconfigured. Refer to Reading Settings on page 94 for more details on how to change these settings.

### **Create a Flex Reading Job**

To create a job with Flex reading:

- 1. From the Job list menu, tap [New job].
- 2. Choose [Manual] to define the job settings.
- 3. Select an envelope.
- 4. Tap [Main document].
- 5. Tap [Custom].
- 6. Enter the document size or select a standard type.
- 7. Tap the [Reading] tab.

8. Select the code type [Flex ..].



Depending on the flex code type the OMR or BCR settings have to be configured.

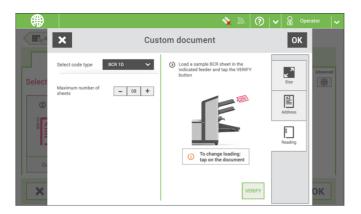


9. Follow the remaining steps to complete the job.

If required the maximum number of sheets can be reconfigured. Refer to Reading Settings on page 94 for more details on how to change these settings.

### **Reading Settings**

When you create a reading job for OCR, OMR, BCR 1D/2D or Flex reading, the following options can be set:



• Maximum number of sheets: use the [-] or [+] button to select the maximum amount of sheets in the set of documents.

The maximum number of sheets in a set is 25. When the number of sheets exceeds 5 or 8, depending on the fold, the document can not be folded anymore. In this case, the maximum length of sheets is 148 mm for a C5/6 envelope. Also make sure that the fold is set to No fold. Ignoring this will certainly lead to stoppages.



When the maximum number of sheets exceeds the programmed maximum number of sheets in a set, the system stops and error FT1-RE1-312 will be displayed. After removing the set and tapping the **[Start]** button, the system starts and repeats the process until an insert or divert mark is encountered. Error FT1-RE1-003 (final set part) will be displayed.

## 9 Operator Maintenance

### **Maintenance Schedule**

Disconnect the mains power supply before performing any maintenance.



The user must not attempt to service the appliance beyond that described in this operator manual. All other servicing must be carried out by qualified service personnel only.

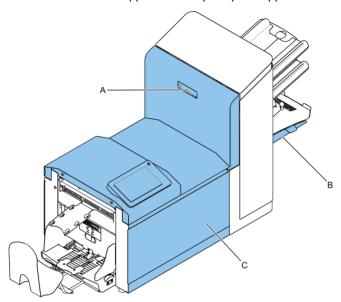
Please contact your authorized distributor.

Maintenance frequency	Maintenance
Daily	<ul> <li>Check the system functions.</li> <li>Keep the system in proper condition by removing dust, paper remains, etc.</li> </ul>
Weekly	The machine is delivered with an extra set of brushes.  To always have one clean set available, it is recommended to soak one set in water and use the other set.  • When dirty or saturated, clean the brushes of the envelope sealing or replace them (see Clean and replace brushes on page 97).  • When dirty or saturated, clean the moistening cloth or replace if necessary (see Replace moistening cloth on page 98).  • Clean feed and insert rollers as instructed by the Service Engineer.
When neces- sary	When the display warns about dusty sensors, clean the applicable sensors. After cleaning, always calibrate the photocells (see Calibrate photocells on page 99).

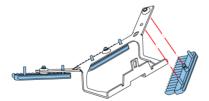
### **Clean and Replace Brushes**

When dirty or saturated, clean the brushes of the envelope sealing or replace them as follows:

- 1. Moisten the new brushes in water.
- 2. Unlock lever A of the upper unit and pull up the upper unit.



3. Remove the brushes one by one by pulling them down from the brush holder.

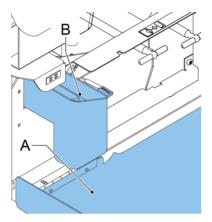


**4.** Replace the brushes. Make sure that the studs on the brushes are fitted in the corresponding holes in the brush holder.

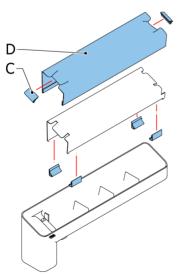
### **Replace or Clean Moistening Cloth**

When dirty or saturated, clean the moistening cloth or replace if necessary. Proceed as follows:

#### 1. Open the front cover A.



- 2. Remove the sealing liquid reservoir **B** from the system.
- 3. Remove the cover with moistening cloth D.

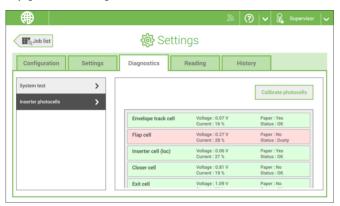


- 4. Remove clips **C** to remove the moistening cloth.
- 5. Clean or replace the cloth.

#### **Calibrate Photocells**

When too much paper dust is built up at the sensors, a warning message is displayed. In that case, calibrate the photocells as follows:

- 1. Log in as supervisor.
- 2. In the settings menu, tap the [Diagnostics] tab.
- 3. Tap [Maintenance].



- Remove all documents and envelopes and close all covers before starting the calibration.
- 5. Tap [Calibrate photocells].

## 10 Fault Finding

### Messages

### Introduction

There are three different types of messages:

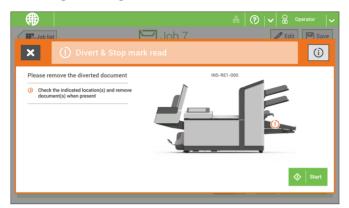
- Indications
- Warnings
- Errors

#### **Indications**



When you run a job, indications can appear like the ones in the example.

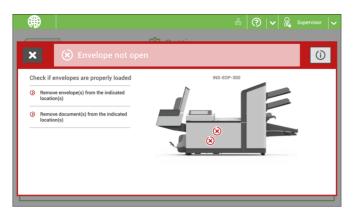
### Warning message



When a warning message is shown, the screen shows the following information:

- · An indication of the area in which the event occurred
- · A warning description
- · A suggested solution behind the arrow
- An event message number; use this number in case that you call support

Tap the [i] button to view more information about the event.



When an error occurs the touch screen shows a screen with the following information:

- · An indication of the area in which the error occurred
- · An error description
- · A suggested solution behind the arrow
- An event message number; use this number in case that you call support

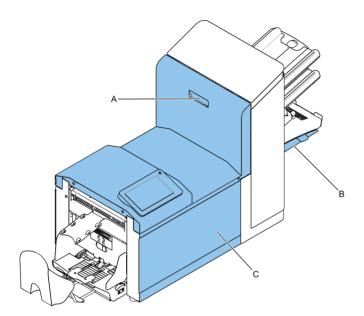
Tap the [i] button to view more information about the occurred error and about the possible actions to avoid the error from re-occurring.

After solving the problem, tap [x] to reset the error (the error screen will disappear).

#### **Special Errors**

- Reading errors (when reading is enabled)
   The document set is diverted. The operator must remove the document set and has to complete the set manually!
- Technical errors
   The display shows a message. The error cannot be solved by operating personnel and assistance of the service support is needed.

### **Clearing Stoppages**



For clearing of stoppages, three system sections can be opened:

- **A** The upper unit to reach the Folder and Feeder area.
- **B** Collator plate to reach the collator area.

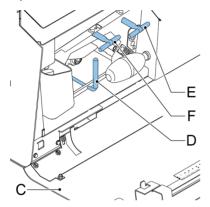
**C** - Front cover to reach the envelope track and inserter area.

#### **Lower Envelope Track**

When a stoppage occurs in the lower envelope track, remove the envelopes as follows:

If needed, envelopes can be transported manually to the insert table or lower envelope track by means of handle **F**. To transport a mail set manually, turn handle **E**.

1. Open the side cover C.

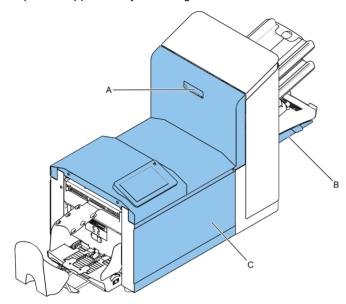


- 2. Lower and hold the handle **D** to the left and remove the envelope(s) from the lower envelope track.
- 3. Release the handle D.
- If necessary, the envelopes and documents can be transported manually by turning the blue knob E clockwise.
- Turn the blue knob F clockwise to manually transport envelopes through the lower envelope track.
- 6. Close the side cover.
- 7. Press the [Reset] button to reset the error and restart the job.

#### Feeder area

When a stoppage occurs in the Feeder area, remove the documents as follows:

1. Open the upper unit by unlocking lever A.

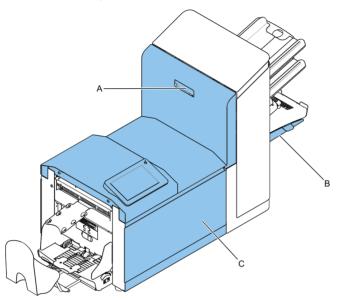


- 2. Remove the documents from the Feeder area.
- 3. Close the upper unit.
- 4. Press the [Reset] button to reset the error and restart the job.

### **Collating Area**

When a stoppage occurs in the collating area, remove the documents from the collating area as follows:

1. Move the collator plate **B** down.

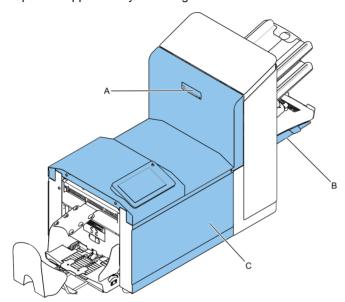


- 2. Remove the documents from the collator area.
- 3. Move the collator plate **B** up in position.
- 4. Press the [Reset] button to reset the error and restart the job.

#### Folder area

When a stoppage occurs in the Folder area, remove the documents as follows:

1. Open the upper unit by unlocking lever A.



- 2. Remove the documents from the Folder area.
- 3. Close the upper unit.
- **4.** Press the [Reset] button to reset the error and restart the job.

#### **Operator Troubleshooting**

To resolve problems:

- 1. Write down the event message number that is shown in the message on the screen.
- 2. Try to solve the problem by consulting the Troubleshooting Table.
- 3. Switch the inserter off and on again, to verify system operation.
- **4.** When the error still occurs contact your service organization.



When contacting the service organization, you will also be asked for the last error message and the software package version of the installed software. To determine the software package version, see Software overview.

## Troubleshooting

Symptom	Possible cause	Remedy	Reference	
The system cannot be started after	System not connected to mains.	Connect the system to the mains.	-	
switching on.	Fuse is blown.	Replace fuse below power switch.	-	
	A cover is opened.	Close the covers.	-	
System stops with envelope at insert position (flap not open).	Envelopes stacked reversed in the hopper.	Check envelope feed adjustments. Place envelopes correctly in hopper.	Loading Envelopes	
	Envelope flap sticks.	Store envelopes according to specifications.	Envelope Specifications on page 116	
	Wrong envelope type used (not according to specifications or job settings).	Change envelopes according to specifications.	Envelope Specifications on page 116	
Envelopes are double fed.	Envelope separation not correctly set.	Adjust envelope separation.	Loading Envelopes	
	Envelopes not placed properly in the hopper.	Check and replace if needed.	Loading Envelopes	
Envelope stops Side guides of the envelope hopper are set too wide.		Check side guides and adjust if needed.	Loading Envelopes	
Envelopes are fed ir-	Hopper almost empty.	Refill hopper.	Loading Envelopes	
regularly.	Separation set too narrow.	Adjust envelope separation.	Loading Envelopes	
	Side guides set too narrow.	Check side guides and adjust if needed.	Loading Envelopes	
	Envelope support not positioned correctly.	Reposition the envelope support.	Loading Envelopes	

Flap is wrinkled and sometimes not opened.	Envelope not within specifications.	Check specifications and change envelopes if needed.	Envelope Specifications on page 116
	Flap sticks.	Store envelopes according to specifications.	Envelope Specifications on page 116
	Flap curled.	Envelopes stored or manufactured improperly.	Envelope Specifications on page 116
	Separation set too narrow.	Adjust envelope separation.	Loading Envelopes
Fingers are placed on top of the envelope.	Fingers adjusted too deep into the envelope.	Check fingers position, adjust if needed.	Adjusting the envelope insert fingers on page 32
	Envelope stops too early.	Check envelope stop position, adjust if needed.	Verifying the Insert Position on page 34
System stops while inserting (stoppage at the inserting point).	Fingers not correctly adjusted.	Check fingers position, adjust if needed.	Adjusting the envelope insert fingers on page 32
	Inserted document too long for used envelope.	Check fold settings.	Editing a job on page 41
	Envelope throat incorrect.	Check envelope specifications.	Envelope Specifications on page 116
	Envelope glued inside.	Eliminate faulty envelopes.	-
	Window not glued properly.	Eliminate faulty envelopes.	-

Flap not sufficiently moistened.	Water level low.	Check water level, refill if needed.	Filling the Sealing Liquid Reservoir on page 54	
	Brushes dry.	Check brushes, replace if needed by the extra soaked set.	Clean and replace brushes on page 97	
	Brushes dirty.	Check brushes, clean if needed.	Clean and replace brushes on page 97	
	Moistening felt dry.	Check the moistening felt, refill water tray if needed.	Filling the Sealing Liquid Reservoir on page 54	
	Moistening felt dirty.	Check the moistening felt, clean if needed.	Replace or clean moistening cloth on page 98	
	Brushes worn out.	Replace brushes.	Clean and replace brushes on page 97	
	Moistening felt worn out.	Replace moistening felt.	Replace or clean moistening cloth on page 98	
Envelope not always ejected from sealer.	Inserted document too big.	Check fold settings, adjust if needed.	Editing a job on page 41	
	Document not inserted deep enough.	Check adjustment of envelope stop position and fingers.	Verifying the Insert Position on page 34	
	Sealing area dirty.	Clean sealing area.	Maintenance Schedule on page 96	

No document fed.	Feeder tray empty.	Refill feeder tray.	Loading documents standard feeder trays on page 48
			Loading documents maxiFeeder
	Separation set too wide / too tight.	Adjust the separation.	Adjusting the Separation of Special Feeders on page 35
			Adjusting the Separation of the maxiFeeder on page 50
	Side guides set too narrow.	Adjust the side guides.	Adjusting the side guides standard feeder trays on page 47
			Adjusting the side guides maxiFeeder on page 49
Skewed documents fed.	Side guides set too wide.	Adjust side guides.	Adjusting the side guides standard feeder trays on page 47
			Adjusting the side guides maxiFeeder on page 49
Double documents fed.	Separation set too wide.	Adjust the separation.	Adjusting the Separation of Special Feeders on page 35
Document set not correctly inserted.	Insert position not correct.	Check insert position.	Verifying the Insert Position on page 34
	Insert fingers not correctly positioned.	Check insert finger position.	Adjusting the envelope insert fingers on page 32
Address not readable from window	Address position not correctly defined.	Check address position.	Adjusting the address position on page 31

# 11 Specifications

### **Technical Specifications**

Model	DS-64i, FPi 2700, FD6210, TSI-4s
Туре	Folder and inserter system for medium office use.
Theoretical max. speed	Basic version:  • 2000 inserts per hour (depending on application)  Premium version:  • 2500 inserts per hour (depending on application)
Power con- sumption	Off mode: 0 W
	Standby (plugged, electronic off) 230V system: 0,26 W Standby (plugged, electronic off) 100V/115V system: 0,14 W
	Idle mode, 230V system: 13,8 W Idle mode, 100V/115V system: 13,5 W
	Run mode; 230V system, premium license:  - 157 W (with catch tray)  - 159 W (with Vertical Stacker)  - 158 W (with Side Exit) Run mode; 100V/115V system, premium license:  - 170 W (with catch tray)  - 172 W (with Vertical Stacker)  - 171 W (with Side Exit)
Voltage toler- ance	100V: +6% / -10%
	115V: +6% / -10%
	230V: +10% / -10%
Fuse	100/115 Vac: T 5.0 A, 125 V.
	Time lag, 5.0 Amps. rated current, 125 V.
	230 Vac: T 2,5 A H, 250 V.
	Time lag, 2.5 Amps. rated current, high breaking capacity, 250 V.

Approvals	RED (Radio Equipment Directive) 2014/53/EU FCC Certificate conform 47CFR, part 15 CB Certificate conform IEC 62368-1 UL Listed I.T.E. (Information Technology Equipment), conform UL-IEC 62368-1, file E153801 Conform NEN-EN-IEC 62368-1 and derivatives.
Noise Level	Basic version:  • 64,8 dBA (with catch tray)  • 66,7 dBA (with HCVS)  Premium version:  • 65,6 dBA (with catch tray)  • 67,6 dBA (with HCVS)  Measurements based on 1 sheet A4 in C5/6 envelope C-fold application (US equivalent: 1 sheet letter size in #10 envelope) (according to ISO 11202)  Note: Noise level may vary depending on application.
Operating temperature	10°C - 40°C (50°F-104°F)
Humidity	30%-80%

## **Hopper and Feeder Capacity**

Envelope hopper	150 envelopes (80 g/m²)	
Document feeder tray	325 sheets (80 g/m²)	

### **Configuration Dimensions and Weight**

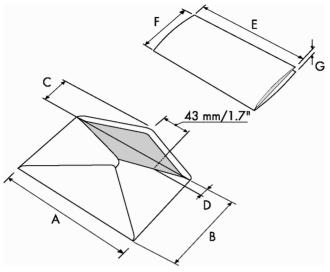
		1 station	1,5 station	2 station	2,5 station
Length*	incl. Catch tray	1270 - 1360 mm (50.0 - 53.5 inch)			
	incl. HCVS	1360 mm (53.5 inch)	1360 mm (53.5 inch)	1360 mm (53.5 inch)	1360 mm (53.5 inch)
	incl. Side exit	1220 mm (48.0 inch)	1220 mm (48.0 inch)	1220 mm (48.0 inch)	1220 mm (48.0 inch)
Width	incl. Catch tray/HCVS	420 mm (16.5 inch)			
	incl. Side exit catch tray	630 - 670 mm (24.8 - 26.4 inch)			
Height	incl. Catch tray	580 mm (22.8 inch)	580 mm (22.8 inch)	580 mm (22.8 inch)	665 mm (26.2 inch)
	incl. HCVS	740 mm (29.1 inch)			
	incl. Side exit	580 mm (22.8 inch)	580 mm (22.8 inch)	580 mm (22.8 inch)	665 mm (26.2 inch)
Weight	Excl. exit op- tions	66 kg (145 lbs)	69 kg (152 lbs)	69 kg (152 lbs)	72 kg (160 lbs)

<sup>\*</sup>plus Maxifeeder; length is 200 mm (7.9 inch) extra

### **Document and Insert Specifications**

Paper quality	Minimum 60 g/m² (15 lb bond)
	Maximum 250 g/m² (62.5 lb bond), when folded max. 170 g/m² (42.5 lb bond)
	Booklets up to approximately 1 mm (0.04 inch) thickness, depending on stiffness
Paper size	Minimum width: 130 mm (5.1")
	Maximum width: 236 mm (9.3"), when folded 230 mm (9.1")
	Minimum length: 90 mm (3.5")
	Maximum length: 356 mm (14")
Folding capa-	V-fold; Basic - up to 5 sheets (max. 80 g/m²)
city	V-fold; Premium - up to 8 sheets (max. 80 g/m²)
	C-fold/Z-fold - up to 5 sheets (max. 80 g/m²)
	Double V-fold - 3 sheets (max. 80 g/m²)
Reply envel- opes (size)	Standard BRE (Business Reply Envelopes)

### **Envelope and Document Set Specifications**



	Α	В	С	D	E	F	G
Minimum	160 mm	90 mm	32 mm	10 mm	130 mm	84 mm	60 g/m2
size	6.3"	3.5"	1.25"	0.4"	5.1"	3.3"	
Maximum	248 mm	162 mm	B-32	75 mm	A-12*	B-6	2 mm
size	9.7"	6.38"	B-1.25	2.9"	A-0.47**	B-0.2	0.08"

<sup>\*</sup> Booklets up to approximately 1 mm (0.04 inch) thickness, depending on stiffness

<sup>\*\*</sup> When insert is more than 1 mm (0.04 inch): A-15 mm / A-0.6 inch

Envelope quality		
Minimum	80 g/m² (20 lb bond)	
Maximum	120 g/m² (30 lb bond)	

#### Remarks:

- The specification of the paper handling equipment is often wider than that of the envelopes and documents handled. The condition of material handled will limit the specified environmental conditions.
- We recommend that materials to be handled are stored at a temperature of 20°C (68°F) with a relative humidity factor of 50%. If difference in temperature occurs

- between store room and mailing area, the material has to be stored near the machine at least 24 hours before use.
- Self-copying paper may cause rubber parts to wear quicker. The rubber used in this machine has the best resistance to Wiggins Teape material.

#### maxiFeeder Specifications

Model	Model MF-4 (A0023987)
Туре	High capacity feeder
Theoretical max. speed	See Technical Specifications on page 112
Power con- sumption	Low voltage supplied by the inserter system.
Approvals	EMC Certificate conform EMC-Directive. FCC Certificate conform 47CFR, part 15. UL Listed I.T.E. (Information Technology Equipment), conform UL-IEC 60950-1, file: E153801. Conform NEN-EN-IEC 60950-1 and derivatives.
Height	210 mm (8.3 inch)
Width	285 mm (11.2 inch)
Length	425 mm (16.7 inch)
Weight	5.05 kg (11.1 lbs)
Noise level	See Technical Specifications on page 112
Operating temperature	10°C - 40°C (50°F-104°F)
Humidity	30%-80%
Feed tray capacity MaxiFeeder 156 mm-Licensed	1200 sheets A5 80 gr. 325x Business Reply Envelopes
Document / BRE insert spe- cifications	See Document Specifications on page 115 and Envelope Specifications on page 116

### **High Capacity Vertical Stacker Specifications**

Model	HCVS-1
Туре	High Capacity Vertical Stacker. Suitable for all kinds of mail sets that consist of at least one 80 grams envelope and one folded document (80 gram).
Power con- sumption	Low voltage supplied by the inserter system.
Approvals	EMC Certificate conform EMC-Directive. FCC Certificate conform 47CFR, part 15. UL Listed I.T.E. (Information Technology Equipment), conform UL-IEC 60950-1, file: E153801. Conform NEN-EN-IEC 60950-1 and derivatives.
Height	550 mm (21.7 inch)
Width	440 mm (17.3 inch)
Length	360 mm (14.2 inch)
Weight	12 kg (26.5 lbs)
Noise level	See Technical Specifications on page 112
Operating tem- perature	10°C - 40°C (50°F-104°F)
Humidity	30%-80%
Stacker capa- city	325 envelopes, depending on application.

# 12 Terminology

### Terminology

Term	Description
Address carrier	The address carrier is the document that carries the address of the person for who the mail-set is meant. The address must remain visible while enclosures are added and the document-set is folded. The fold type and selected envelope must ensure that the address is visible behind the window in the envelope. For personalized mailings there is always an address carrier present as long as envelope printing is not supported. Normally there is one address carrier.
Address position	Position of the address on the address carrier, measured from the upper left corner. The address position consists of a horizontal x coordinate, a vertical y coordinate, a horizontal width w and a vertical height h.
Automatic	The feature of an Inserting System to automatically determine its Job settings by measuring the sizes of documents and envelope. From all Feeders that are loaded one sheet will be taken. Based on the maximum document length (which is also the length of the documentset) and the length of the envelope the fold type is determined.
Automatic job	A job that is created with the Automatic functionality.
Barcode Reading (BCR)	Barcode Reading is intended for reading and interpreting printed barcodes. The codes give information to the Inserting system about how to build-up and handle a set.
Business Reply Envelope (BRE)	Envelope included in outgoing mail-sets for addressee response purposes.

C-fold	Fold type in which a document-set is folded twice in which the folded flaps are on top of each other. This fold is illustrated in the picture below.
	L2-L1  L1  sideview
	The position of both folds is adjustable. Synonym: Letter fold.
Clear	The function of an inserting system in which all mail-sets in progress are finished and the document path is left empty.
Daily Mail	Capability of an inserting system to manually insert mail-sets one by one into the system, which are then inserted into an envelope. Optionally, depending on settings, additional enclosures can be added and the mail-set can be folded. This function is intended for small amounts of mail that each can have a different build-up.
Document	A document is one of the components of a mail-set. A document can consist of one or more sheets. Documents can be divided into address carriers and enclosures. For personalized mailings there is always one address carrier and an optional number of enclosures.
Document-set	The document-set is the physical collection of address carrier and enclosure(s) that is under production in the Inserting System. The document-set is completed during production and is to be inserted in the envelope. The number of enclosures can range from 0 to the limit opposed by the number of available Feeders. Once the document set has been inserted into an envelope it is called mail set.
Double Feed Control (DFC)	Double Feed Control is the sensor that measures the thickness of a sheet to check if the inserting system does not accidentally take more sheets than intended. DFC sensors exist on Feeders (double sheet detection). Currently DFCs on inserting systems perform relative measurements, which means that they need a cycle to 'learn' the thickness of a sheet. Also the length of the document is measured so partly overlapping sheets will be detected.
Double parallel fold	See double V-fold.

Double V-fold	The double V-fold is a type of fold where the document is first folded halfway and the resulting folded set is again folded halfway. This fold is illustrated in the picture below.
	sideview
	The position of both folds is adjustable. Synonym: double parallel fold.
Envelope	The envelope is the packaging of a mail set. Window envelopes are envelopes that have a transparent section through which the address on the address carrier can be read. Besides the normal top-closing window envelopes there are also bottom-closing envelopes.
Face down	Situation in which the front of a sheet is facing downwards when placed in a document feeder.
Face down leading	Situation in which the front of a sheet is facing downwards and the top of the sheet is closest to the separation unit in a document feeder.
Face down trail- ing	Situation in which the front of a sheet is facing downwards and the bottom of the sheet is closest to the separation unit in a document feeder.
Face up	Situation in which the front of a sheet is facing upwards when placed in a document feeder.
Face up leading	Situation in which the front of a sheet is facing upwards and the top of the sheet is closest to the separation unit in a document feeder.
Face up trailing	Situation in which the front of a sheet is facing upwards and the bottom of the sheet is closest to the separation unit in a document feeder.
Feeder	A Feeder is a Module for the input of documents to the inserting system. The Feeder separates documents sheet by sheet from the stack of documents in the feed tray.
Feeder linking	The ability to load two feeders with the same document type where the Inserting System automatically switches to a second feeder when the first feeder is empty and vice versa. In the mean time the first feeder can be refilled, so the inserting system can keep running without having to stop for refilling the feeders.
Feed tray	Part of the feeder that contains the stack of documents.

Flexcode OMR/BCR	An OMR/BCR code for which the meaning of the marks can be programmed in a dedicated way for a specific customer. This is normally used to support the OMR/BCR codes from other suppliers.
High Capacity Vertical Stacker (HCVS)	Optional stacker that is mounted on the exit of the system, to stack filled envelopes.
Insert	<ul> <li>An insert is the action of inserting a document-set into an envelope.</li> <li>For native English speaking customers an insert is also a short, not to be folded document, usually an enclosure.</li> </ul>
Inserter	An Inserter is the Module where the document-set is inserted into the envelope, the envelope is closed and if necessary sealed.
Inserting system	The system of all the Modules that cooperate to perform the inserting function (accumulate document-set, fold and insert) and have a single point of control.
Job	<ul> <li>A job is an actually produced collection of mail-sets based on a certain Job Definition at a certain point in time for a specific purpose. It consists of:</li> <li>The Job definition used for the production</li> <li>Information about the batch size</li> </ul>
Job counter	The counter that registers the number of mail-sets that is produced as part of a specific job.
Letter fold	See C-fold.
Linking	See Feeder Linking.
Loc	The Loc is the unit in the system that transports the envelope just after the document was inserted. It is called Loc (short for locomotive) as the early developments had a straight cover and a number of transportation rollers sticking out. This made it look like a locomotive from the side. In the current systems the loc also carries the brush holder and sealing rollers.
maxiFeeder	Feeder with high capacity feed tray (e.g. 1200 sheets A4 80gr).
Multifeed	The feature of an Inserting System in which more than one sheet is taken from a Feeder.
OMR	Optical Mark Recognition
OMR code definition	Standard 1-track OMR code definition. Specifies the amount of reading marks used and the functionality linked to each of them (how each should be interpreted).

Operator	The person operating a document system.
Optical Mark Recognition (OMR)	Optical Mark Recognition is intended for reading and interpreting printed codes. These codes are one or more black marks which are read from a document. These marks give information to the Inserting system about how to build-up and handle a set.
Reading error	Condition in which the system could not reliably read or interpret the OMR reading marks or barcode from a sheet.
Reading marks	Marks added to documents containing finishing instructions that can be identified by a reading head and interpreted according to the used OMR code definition.
Service engineer	Technical engineer whose task it is to resolve problems with systems in the field. Besides dealing with problems, service engineers are also responsible for preventive maintenance.
Single fold	See V-fold.
Stop counter	Counter which sets the amount of envelopes to be filled. After filling this amount of envelopes the system will stop (even during a clear).
Supervisor	Person who is responsible for the technical state of the machine. Normally a supervisor has access to programming functions, which are restricted for standard users.
Test run	A test run is intended to validate the settings of the Inserting System:     Inspect and adjust the stop position of the envelope.     Check the fold settings for one set.     Check if the address is correctly positioned behind the envelope window.
Thickness detection	Checks the thickness of the document set. If the thickness is less or more than the set value an error message is displayed.
Tray	Contains a stack of paper for a printer or inserter. This paper is supplied to the machine for further processing.
V-fold	A V-fold implies the document/set is folded once. The fold-position is adjustable. This fold is illustrated in the picture below:
	sideview
	Synonym: Single fold.

Vertical transport	The vertical transport section between feeders and collator.
Z-fold	A Z-fold means that a document is folded twice in such a way that each folded flap is on a different size of the folded document, resulting in a Z-shape. This fold is illustrated in the picture below.
	L2-L1 L2 sideview
	The position of both folds is adjustable. Synonyms: zigzag fold