FORMAX®

7700 Series
High-Volume Modular Inserters

9/2022

OPERATOR MANUAL

WARNING

Improper installation, use, adjustment, alteration, service and or maintenance may result in property damage and or serious bodily injury!

 Ensure all safety information detailed in section **1.3 Safety** including its sub-sections is read and understood in its entirety before installation, operation, maintenance and or servicing of this machine!

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Safety Standards Compliance **1**

1.1   About this Manual

Disclaimer

The data contained herein is the most current known to the manufacturer at the time of preparation and is believed to be accurate.

It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application.

This guide is published without any warranty. Improvements and changes to the online guide (if applicable) 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 version of this guide (if applicable).

1.2   Standards and Compliance

Safety and Legal Markings

Environmental Legal Compliance

This product complies with EU Directive 2012/19/EU, Waste of Electrical and Electronic Equipment (WEEE), in all EU member states.

This product complies with EU Directive 2011/65/EU, Restriction of Hazardous Substances (RoHS), in all EU member states.

This product complies with FCC 47CFR Part 15B Class A, Federal Communications Commission (FCC), in all states and territories of the United States.

Applicable Directives

Low Voltage Directive 2014/35/EU
Electromagnetic Compatibility Directive 2014/30/EU

The product presented in this guide meets the requirements of applicable directives.

All machines are built to strict safety specifications in accordance with UL Standards, Low Voltage Directive, and Electromagnetic Compatibility Directive.

For further information please contact your authorized distributor.

1.3   Safety

The information presented in this section is given as a guide to general precautions and safety procedures that should be exercised during installation, operation, maintenance and or servicing of this machine.

Whilst every effort has been made to ensure completeness of this document, owners, operators, and service technicians of this machine are reminded of their responsibilities to comply with all relevant legislations including Risk/COSHH Assessments if applicable and Approved Codes of Practice.

Always be aware of all warnings and notes that are listed within this manual or noted anywhere on the machine itself. Various symbols are used in this manual, and on the product itself to ensure correct usage, to prevent danger to the user and others, and to prevent property damage.

The meanings of these symbols are described in section **1.3.1 Safety Symbols**, and is important these symbols are observed, and their descriptions read thoroughly to understand their meanings.

Prior to carrying out any installation, operation, maintenance or servicing procedures on this machine, ensure you have fully observed and understood all safety notes detailed in this section.

1.3.1   Safety Symbols

Description	Symbol
Protective Earth (Ground) Identifies terminals intended for connection to external conductors, or protective earth (ground) electrodes, protecting against electric shock in case of a fault.	
Caution - Risk of Electric Shock Identifies equipment with a hazard of electric shock.	
Caution - Moving Parts Indicates the instructional safeguard to keep away from moving parts.	
Caution - Laser Beam Indicates warning of a laser beam.	
Caution - Heavy Object Indicates the object is heavy, adhere to the safety instructions for provisions of lifting and moving.	
Caution - Fuse Identifies equipment that is fused. Observe correct fuse ratings where possible before replacing.	
Caution/Warning Indicates a situation in which minor, moderate, or serious injury could occur because of the hazard present.	
Important Note Refers to the important note referenced/detailed within the manual.	
Refer to Manual Refers to the relevant instructions referenced/detailed within the manual.	

1.3.2   General Safety Notes

WARNING

- Keep the work area around the machine clean. A minimum one metre of clear unobstructed working space is always required around the machine.

- The machine must be used only as intended by the manufacturer and should not be tampered with or altered in any form.

- The machine must be operated, maintained and or serviced only by trained and authorised personnel.

- Do not operate the machine unless all of the covers are in place and undamaged, and all warning labels are in place and legible. If any external cover is damaged, it must be replaced only by authorised personnel or certified engineers.

- All covers contain interlock safety cut-off switches. Do not try to bypass the interlock safety switches, and do not attempt to operate the machine without covers, or if any of the interlock safety switches are inoperable.

- Do not wear any loose clothing or jewellery, and long hair must be tied back or tucked under a hat when working near the machine, as they may become caught in any one of the moving parts resulting in injury.

- Before any cleaning, maintenance and or servicing, the machine must be completely isolated from the power source, by pressing the toggle switch located at the rear of the Insert Head to the off position, and unplugging the mains power cable completely from the electrical power supply.

- Ensure the machine is clean before use. Wipe off any paper dust built up outside the cabinets. If paper dust is collecting inside the machine, open the covers and vacuum it out gently or use an invertible type non-flammable air-duster only.

- Although the manufacturer takes care to eliminate sharp edges to reduce danger, please handle all manufactured parts with care to avoid any risks of cutting.

- When the machine is not in use, the mains power cable should be completely disconnected from the electrical power supply, stored and positioned safely.

1.3.3   Power Connections Safety Notes

WARNING

- Ensure any isolation or disconnect device, including the mains power supply remain unobstructed at all times.
- Ensure the mains power cable and its connectors are sound and undamaged. Should any electrical cable become damaged do not operate the machine, and ensure any damaged electrical cable is replaced with a correctly certified and rated replacement by the manufacturer.
- A voltage of 230V/115V may be present inside this machine. The power source can produce enough voltage and current to be very dangerous.
- This machine is equipped with a three-pronged plug. One of the prongs on the plug provides a safety grounding (protective earth) feature. Ensure the plug is always connected to a properly wired three-prong outlet. Do not use a two-prong adapter without grounding the machine properly.
- The machine must be earthed. Never remove the third prong from the plug. The safety grounding (protective earth) feature provides extra protection in the event of an electrical problem.
- The mains power supply is fused on both live and neutral sides. Service personnel should be aware that a mains voltage can exist even if no lighted neon shows.

1.3.4   Emergency Safety Notes

WARNING

- Opening any cover of the machine will trigger the interlock safety cut-off switch and stop the machine operation (including all moving parts).
- Should a fault occur with the machine, immediately isolate the machine completely from the power source, by pressing the toggle switch located at the rear of the Insert Head to the off position, and unplugging the mains power cable completely from the electrical power supply.

Introduction 2

2.1   General Overview

The 7700 Series is a high-volume Inserter/Folder. It is of modular construction and as a basic configuration it consists of an Insert Head, with a feeding unit fitted such as a Versatile Feeder, Feeder Folder, or a Tower Folder.

Other configurations may include multiple module units, depending upon the machine build ordered - these units are listed below:

- Insert Head
- Versatile Feeder
- Feeder Folder
- Tower Folder
- Output Conveyor
- Output Sorter
- Turner
- Dynamic Envelope Printer

See section 2.4 7700 Series Configurations for further assistance.

2.2   Functional Overview

The function of the 7700 Series machine is to fold forms to 'C', 'Z', 'V' or double forward fold, either separately, in fixed multiples or in varying groups.

Enclosures such as inserts, reply envelopes etc. may be added.

Folded forms and enclosures are collated in the collation area in the Insert Head before insertion into the envelope. Forms may be inserted without sealing the envelope for subsequent checking or hand insertion.

Note:

Unfolded forms and enclosures may also be collated before insertion into C4 envelopes.

The Insert Head is equipped with a PC controlled Integrated Mail Operating System (IMOS), and is accessed via touch-screen monitor or keyboard/mouse from where jobs can be programmed and run.

The number of jobs that can be programmed is limited only by the capacity of the PC.

See section 3.1 IMOS Control Panel for further assistance.

Batch processing functions allows a pre-set number of cycles to be completed before the machine automatically stops.

See section 3.4.3 Batch Count Settings for further assistance.

Barcode/2D/OMR (with a number of barcode symbologies) are compatible for use with a mark-reading Versatile Feeder, Feeder Folder, or Tower Folder, allowing a group of forms to be collated on the track prior to folding.

No manual setting of the fold plates or envelope closer is required, as these are adjusted automatically according to the settings within IMOS.

See section 4.4 Fold Settings for further assistance.

A daily mail function can be used as an optional feature on a Versatile Feeder, Feeder Folder or Tower Folder, and allows groups of documents (stapled or loose) to be hand-fed; they will then be folded and inserted into an envelope (Tower Folder only).

See section 5.3.4 Daily Mail for further assistance.

If other hoppers are loaded, further forms can be collated.

2.3   Overview of Components

An overview of the main components for a basic 7700 Series configuration are identified in Figure 2.1.
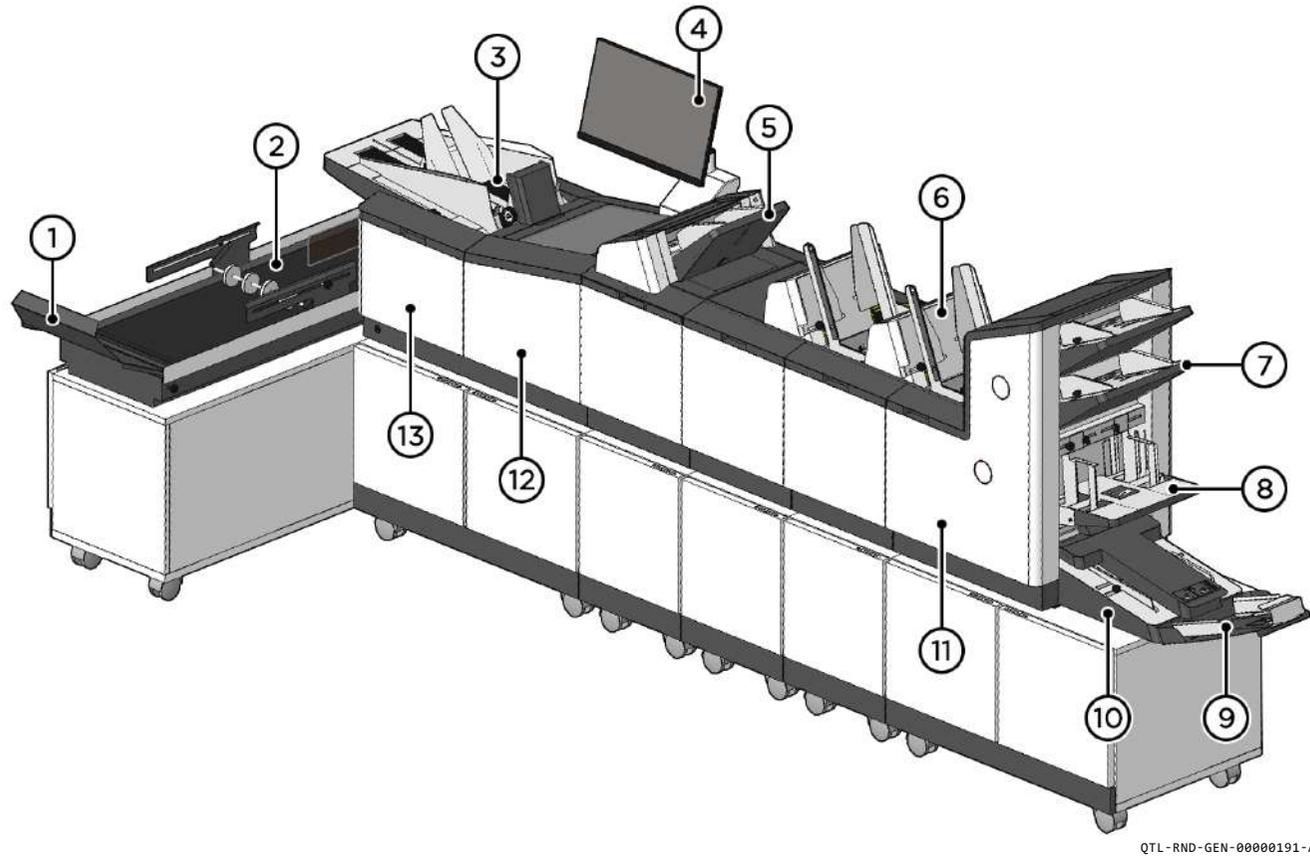
QTL-RND-GEN-00000191-A-00

Figure 2.1 – 7700 Series overview of main components

1. Adjustable Backrest
2. Output Conveyor
3. Insert Head Envelope Feeder
4. Touchscreen Monitor
5. Feeder Folder
6. Versatile Feeder
7. 500-Sheet Feed Tray
8. 1000-Sheet Feed Tray
9. Divert Tray
10. Accumulator
11. Tower Folder
12. Collation and Insertion area
13. Wetter and Closer

2.3.1   Insert Head Components

Insert Head collates all documents in a pocket before insertion, feeds the envelope, inserts the pack and seals the flap.

Envelope Feeder

Envelope Feeder holds up to 800 envelopes (DL). It is fitted with a sensing conveyor that operates on demand to move the envelope stack forward.

Collation and Insertion Area

Folded forms either separately or in groups, are collated here into one pack (along with enclosures) by the collate pocket. The pack is then inserted into the envelope.

Touchscreen Monitor

Touchscreen Monitor is used to operate and navigate IMOS and responds to button pushes through the Graphical User Interface (GUI). A keyboard and mouse may also be fitted to operate and navigate IMOS.

Wetter and Closer

The filled envelope flaps are moistened by a built in Wetting system, which can be turned off in software. Envelopes are closed and sealed before being ejected.

2.3.2   Versatile Feeder Components

Versatile Feeder is a track mounted unit, with an end-station variant also available. Up to 8 Versatile Feeder units may be fitted (7 if a Tower Folder unit is fitted). It feeds enclosures such as short-form inserts (cards, reply envelopes, booklets), flyers etc, onto the track for subsequent insertion.

Versatile Feeder is available with a single feed hopper only, holding up to 1000 80gsm A4 inserts, with mark-reading variants available for OMR/BCR/2D and QR Codes (top read only).

2.3.3   Feeder Folder Components

Feeder Folder is a track mounted folder unit for folding document inserts, and has a single feed hopper with capacity of up to 500 sheets of A4 80gsm paper, and optional handfeed slot located in front of the paper hopper.

Feeder Folder is fitted with a 2-plate folding mechanism for 'C', 'Z' or 'V' fold document inserts, and a CIS (Contact Image Scanner) capable of reading Barcodes (1D & 2D) and OMR marks (1-track & 2-track) with a maximum scanning width of 216mm.

Multiple Feeder Folder units may be fitted together, and with other units (e.g. Versatile Feeders, Tower Folder), however the Feeder Folder must be the first unit fitted directly after the Insert Head, and cannot be fitted after a Versatile Feeder.

2.3.4   Tower Folder Components

Tower Folder is a folding unit and is only available as an end module. It can be fitted to the Insert Head on its own, or in conjunction with Versatile Feeders and or Feeder Folders. It folds documents either separately or in groups, using an accumulator, and is fitted with various options of feed pods (maximum of 2 feed pods).

> **Note:**
>
> Folding, including no-fold options may be set within IMOS, and used for certain job types if required.

Tower Folder uses a 3-plate folding mechanism, and OMR/BCR/2D and QR Codes reading is optionally fitted, though fitted as standard on some variants. A no-read option is also available on some variants.

Feed Pod

1 or 2 Feed pods may be fitted to the Tower Folder depending on the configuration, and each pod consists of either of the following with mark-reading available as an option:

- 2 x 500-Sheet Hopper
- 1 x 1000-Sheet Hopper

Accumulator

Accumulator is fitted as standard to the Tower Folder and allows groups of forms to be collated together before folding as a group, and is also fitted with a divert tray.

2.3.5   Output Conveyor Components

Output Conveyor is an output device intended for use with a Sorter, Franker, Envelope Printer, and or Inserter to provide a means of receiving filled envelopes prior to hand removal for subsequent further handling, and may be fitted in two possible orientations.

Speed of the Output Conveyor can be adjusted within IMOS for the relevant job, and batches can be 'jogged' to provide a gap between each batch.

The Output Conveyor can be attached to the Inserter in two orientations:

- Angled 90° to the Inserter in the direction of the operator (default orientation)
- In-line with the Inserter

Adjustable Backrest

Adjustable Backrest allows envelopes to stack up against it once they reach the end of the conveyor, and may be adjusted to suit the required amount of tilt.

2.3.6   Output Sorter Components

Output Sorter is an output device and receives mail-pieces from an Inserter and directs them to two or more output paths, e.g. an Output Conveyor. Operation of the Output Sorter is programmed within IMOS and is job-specific. A maximum of 2 sorter units may be attached to the machine.

Sorter Catch Tray

Sorter Catch Tray is optionally fitted at either exit of the Output Sorter, and receives the envelopes in a stack to allow subsequent hand removal. It may be adjustable to suit a variety of envelope sizes.

2.3.7   Turner Components

Turner is an output device that delivers mail-pieces to a Franker or Dynamic Envelope Printer, and turns certain sized envelopes through 90° in order to correctly orient them for subsequent franking operation: mainly applicable to C4 envelopes, and C5 with vertical windows.

Turner can be fitted to an Output Sorter, or on its own. Operation of the Turner is programmed within IMOS and is job-specific.

2.4   7700 Series Configurations

7700 Series may be arranged in various configurations and with various options dependent upon what units have been ordered. Figure 2.2 shows an example configuration.

For further information regarding possible configurations, please contact your local Formax Dealer.
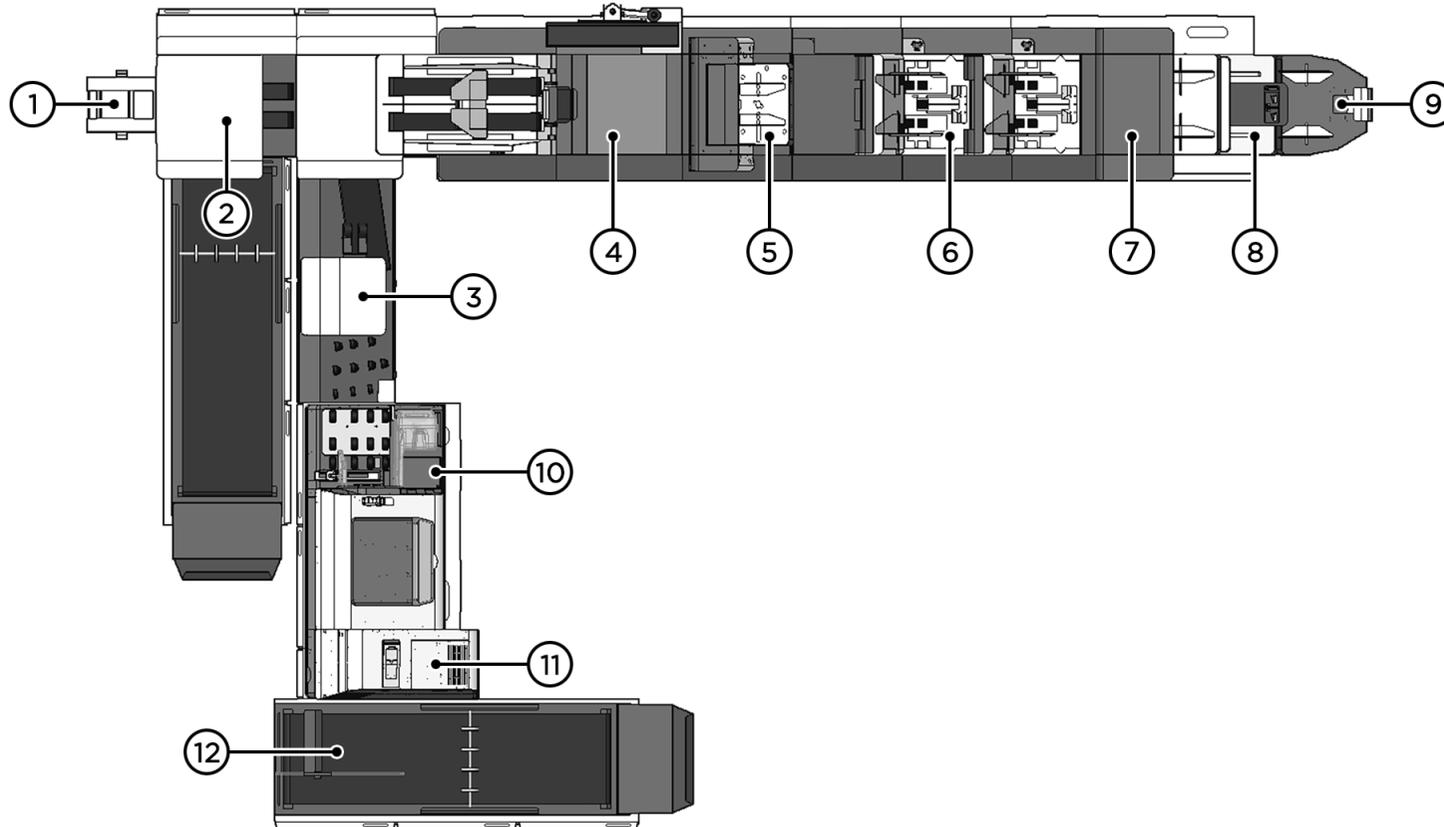
QTL-RND-GEN-00000192-A-00

Figure 2.2 – 7700 Series example configuration

1. Sorter Catch Tray
2. Sorter
3. Turner
4. Insert Head
5. Feeder Folder
6. Versatile Feeder
7. Tower Folder
8. Accumulator
9. Divert Tray
10. Dynamic Envelope Printer
11. Franker
12. Output Conveyor

2.5   Powering on the System

Both the machine and PC must be switched on independent of each other.

1.   To power on the machine, first press the I/O toggle switch at the rear bottom right panel of the Insert Head as shown in Figure 2.3.

Figure 2.1 – Rear I/O toggle switch

2.   Then press the front I/O power button located at the front bottom left panel of the Insert Head as shown in Figure 2.4.

Figure 2.2 – Front I/O power button

Note:

A green LED indicates that the machine is switched on/powering on.

3.   Open the cupboard below the Insert Head to access the PC, and press the I/O button on the PC to power it on.

> The system can be set to automatically power-down after 60 minutes of idling (no activity), see section 3.2.3.2 System Options for further assistance.

> Pushing and holding down the front I/O power button for one second will power-down both the machine and PC. Closing IMOS will shut down the Inserter.

Integrated Mail Operating System (IMOS)   3

3.1   IMOS Control Panel

The IMOS control panel as shown in Figure 3.1 is the main user interface between the operator and the machine.
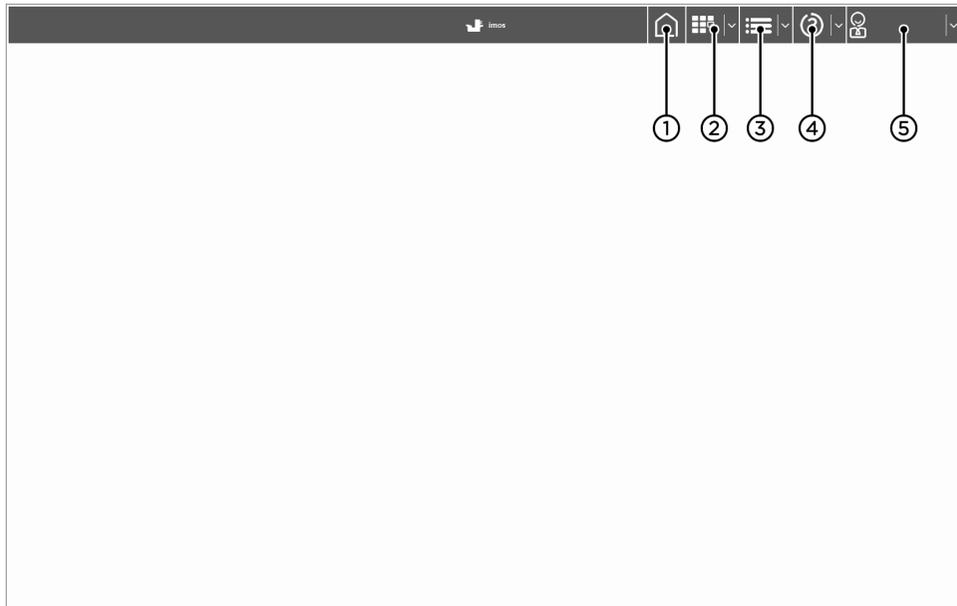
QTL-RND-SCR-00000450-A-00

Figure 3.1 – IMOS user interface control panel

The user interface allows access from hardware and unit set-ups, to setting up and running jobs.

1.   Run screen

   ▪   Running or stopping a job

   ▪   Fine tuning a job

2.   Jobs screen

   ▪   Selecting or editing an existing job

   ▪   Defining and creating a new job

3.   Menu screen

   ▪   Libraries for storing, creating new documents, envelopes, barcodes and labels reading definitions, and postal products, etc

   ▪   Admin and Engineer services for hardware and unit set-ups, and diagnostics

Note:

Access to the Menu screen is only available once logged in as a Supervisor or Engineer.

4.   Help

   ▪   Help, and Remote assistance

5.   Users / Shut-down

   ▪   Log on, log off, and switching users

   ▪   Changing user password

   ▪   Shut-down machine

!   Correct access rights must be granted before gaining access to certain functions of IMOS.

3.2   Menu Screen

To access the Menu screen, press the '**Menu**' button located in the top right of the control panel as indicated in Figure 3.2.

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Figure 3.2 – Menu screen

> ⚠ Access to the Menu screen is only available once logged in as a Supervisor or Engineer.

> ⚠ Access to Admin Settings is only available once logged in as a Supervisor.

3.2.1   Libraries

Libraries list the available existing OMR, BCR, Documents, Envelopes, and Postal Products that have been defined and available for use when defining a mailset. Existing definitions within the library can be copied and edited if needed, as well as the option for creating new definitions.

Once a new definition has been created, it will then be added to the list of definitions to be used for mailsets. Figure 3.3 for example shows the list of documents defined and available for use, with options for copying and editing, or creating a new definition.
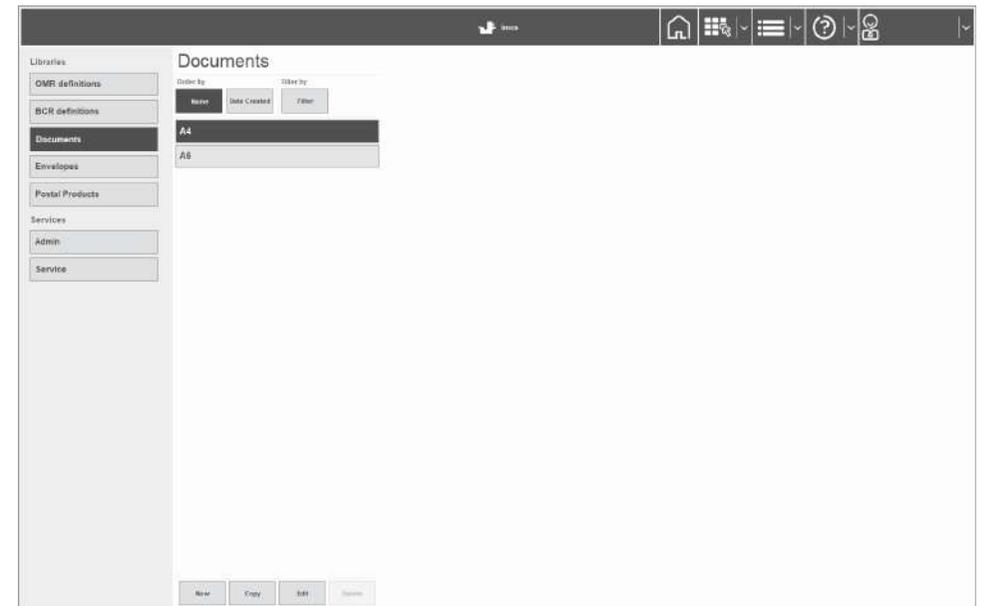
QTL-RND-SCR-00000104-A-00

Figure 3.3 – List of defined documents

Note:

Definitions can also be sorted by name, date created, and by specific filters applied for easy finding of a previously created definition.

> ⚠ Both Supervisors and Engineers can copy, edit and create new definitions from within the Library.

3.2.1.1   OMR Definitions Library

To create new OMR definitions to be used for documents when defining a mailset, contact your local Support Engineer.

See section 8.9 Reading Specifications for further information on OMR definitions.

3.2.1.2   BCR Definitions Library

To create new BCR definitions to be used for documents when defining a mailset, contact your local Support Engineer.

See section 8.9 Reading Specifications for further information on BCR definitions.

3.2.1.3   Documents Library

To create new Documents to be used when defining a mailset. see section 4.2.4 Creating a New Document for further assistance.

3.2.1.4   Envelopes Library

To create new Envelopes to be used when defining a mailset, see section 4.2.2 Creating a New Envelope for further assistance.

3.2.1.5   Postal Products Library

To create new Postal Products to be used when defining a mailset, see section 4.5.1 Postal Product for further assistance.

3.2.2   Admin Settings - Supervisor

Admin settings can only be accessed by a Supervisor, by selecting '**Admin**' under Services within the Menu screen as shown in Figure 3.4.
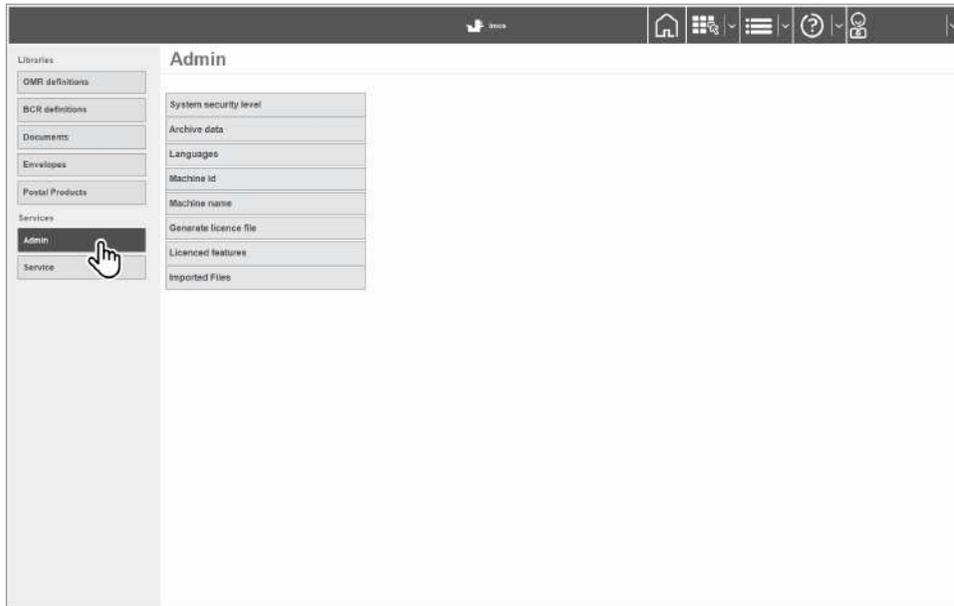
QTL-RND-SCR-00000105-A-00

Figure 3.4 – Supervisor Admin settings

Admin settings allow access to the following functions and settings:

- System Security Level
- Archive Data
- Languages
- Machine Id
- Machine Name
- Generate Licence File
- Licenced Features
- Imported Files

3.2.2.1   System Security Level

System Security allows security levels to be set for the machine. To set a security level, select a level from the list, and press '**Ok**' once complete as shown in Figure 3.5.

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Figure 3.5 – System security levels

Table 3.1 shows the security level options available, and an example list of certain operations and features available to each associated security level.

Security Level	Security Type	Operator Level	Description	On Startup
Low (default)	Least Secure	Expert Operator	Operator can run/edit/create jobs but cannot access Main menu	Run screen displayed
Medium	More Secure	Standard Operator	Operator can only run jobs	Run screen displayed
High	Most Secure	None	Operator has no access to the system. All users must log on	User screen displayed

Table 3.1 – Security level operations and features

3.2.2.2   Archive Data

Archive Data allows the backup of IMOS system files (Libraries, Users, and Jobs data) in case of lost or corrupt critical IMOS files due to pc failure or malfunction.

Select '**Archive Data**' located under '**Admin**' services within the Menu screen and browse for a folder in the dialog box, press '**Ok**' once complete as shown in Figure 3.6.

> **Note:**
> The USB key supplied with the machine, if plugged into the PC at all times can also be used as the backup location allowing the data to be stored remotely off the PC hard drive.
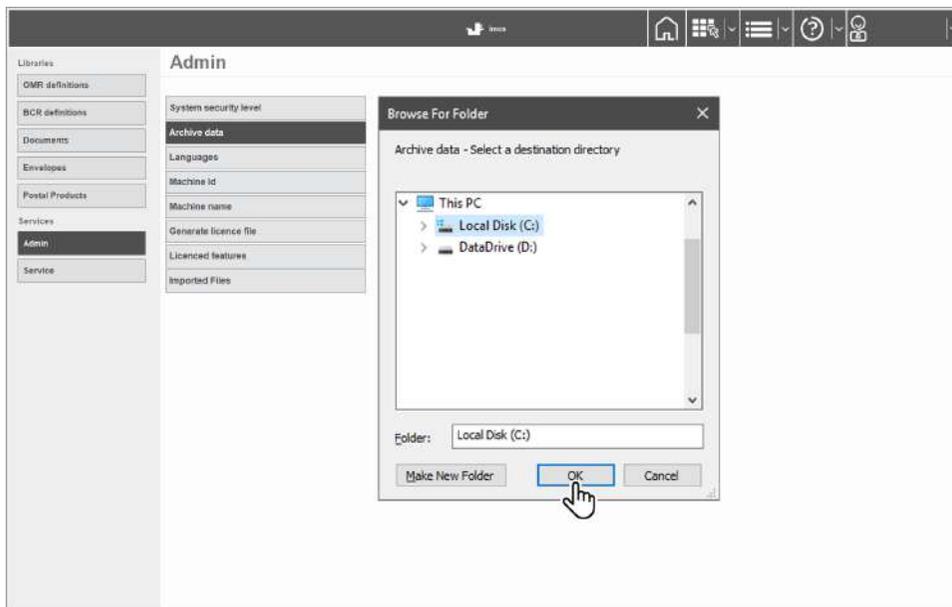
QTL-RND-SCR-00000107-A-00

Figure 3.6 – Archiving Data

! It is recommended to archive data on a regular basis.

3.2.2.3   Languages

Languages allows the choice of which language IMOS will display when operating or servicing the machine.

To set a language, select an available language from the list, and press '**Ok**' once complete as shown in Figure 3.7.
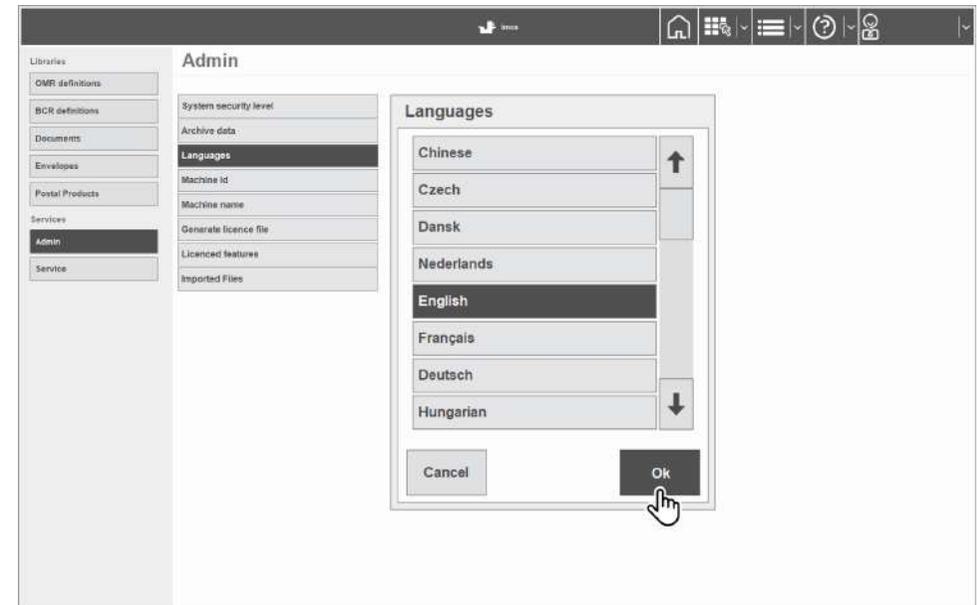
QTL-RND-SCR-00000108-A-00

Figure 3.7 – Selecting a Language

3.2.2.4   Machine Id

Machine Id allows the user to assign a Id for the machine using the on-screen keypad as shown in Figure 3.8, press '**Ok**' once complete.
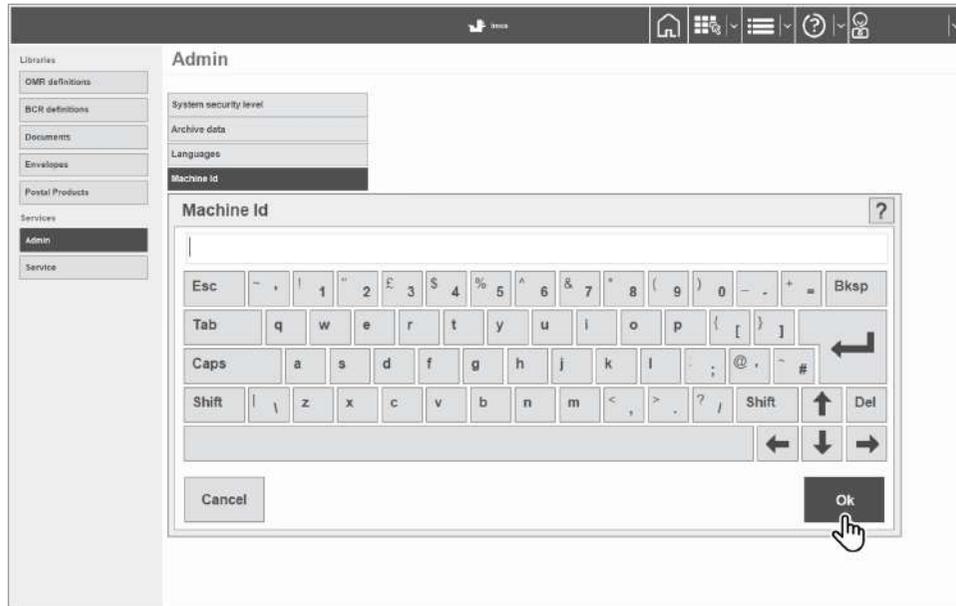
QTL-RND-SCR-00000109-A-00

Figure 3.8 – Assigning a Machine Id

! Multiple machines on the same site should have different Machine ID's.

3.2.2.5   Machine Name

Machine Name allows the user to assign a name for the machine using the on-screen keypad as shown in Figure 3.9, press '**Ok**' once complete.
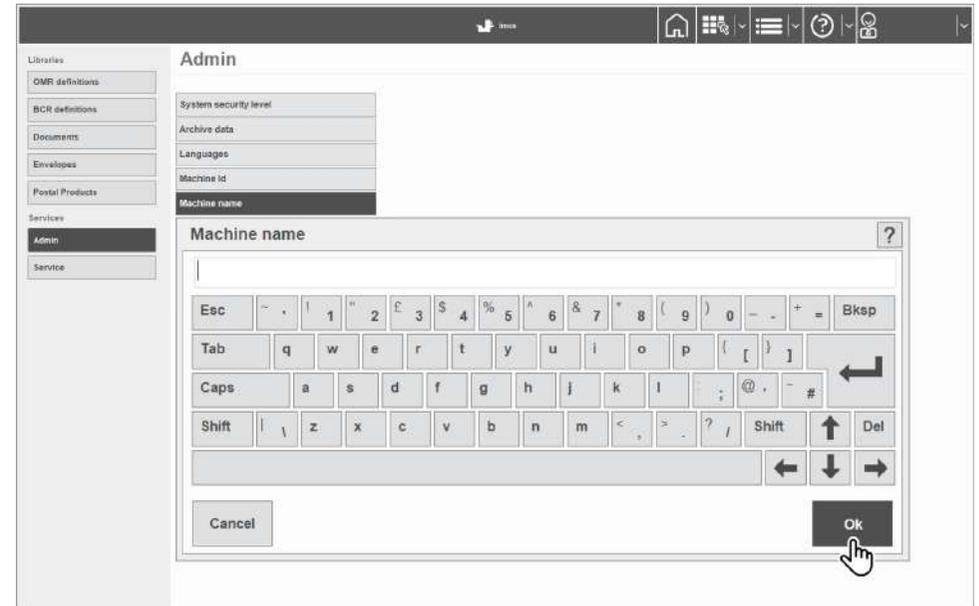
QTL-RND-SCR-00000110-A-00

Figure 3.9 – Assigning a Machine Name

! Multiple machines on the same site should have different Machine Names, and must not contain any spaces.

3.2.2.6   Generate License File

Generate License File allows the generation of a blank License_IMOS.ini file to be used for upgrading by your local support service team, and will erase any existing licenses on the machine.

Press '**Ok**' once complete as shown in Figure 3.10.
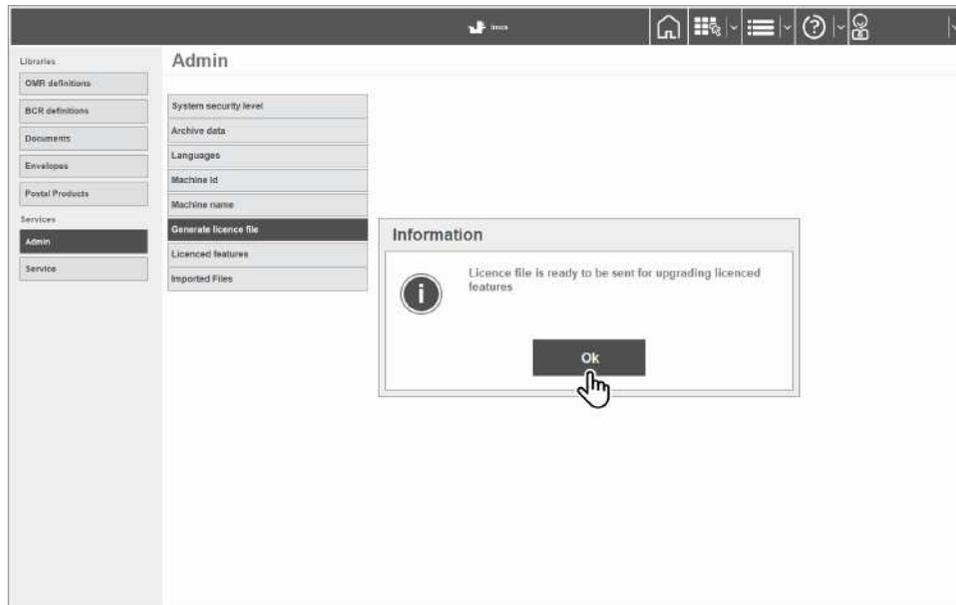
QTL-RND-SCR-00000111-A-00

Figure 3.10 – Generating a License ile

3.2.2.7   Licensed Features

Licensed Features displays the current features licensed and unlicensed (if applicable)on the machine as shown in Figure 3.11.
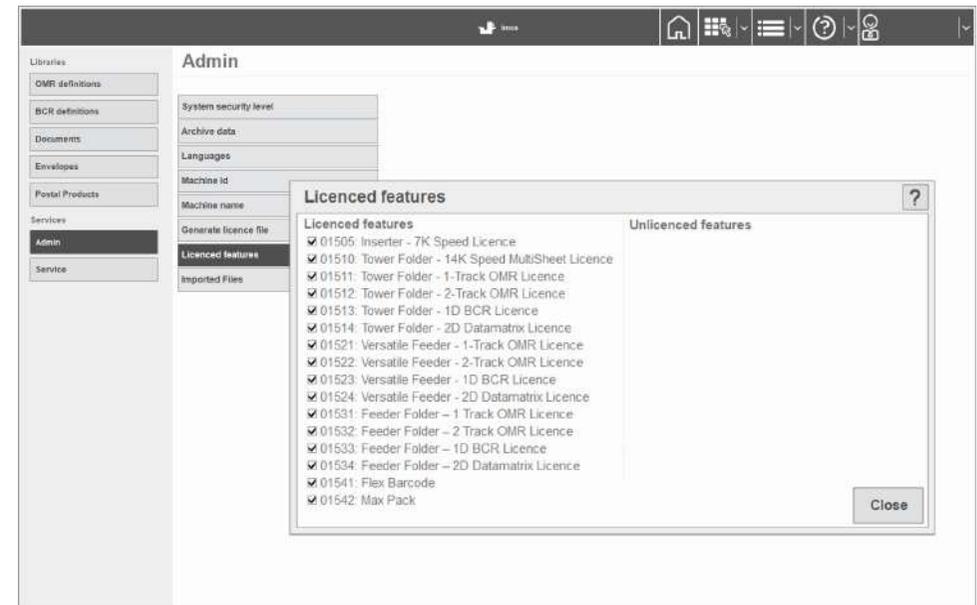
QTL-RND-SCR-00000451-A-00

Figure 3.11 – Licensed features

See section **8.9 Reading Speci ications** for further information on the read licensing of Barcodes and OMR marks.

3.2.2.8   Imported Files

Imported Files displays details of Custom Flex_barcodes imported into IMOS as shown in Figure 3.12.
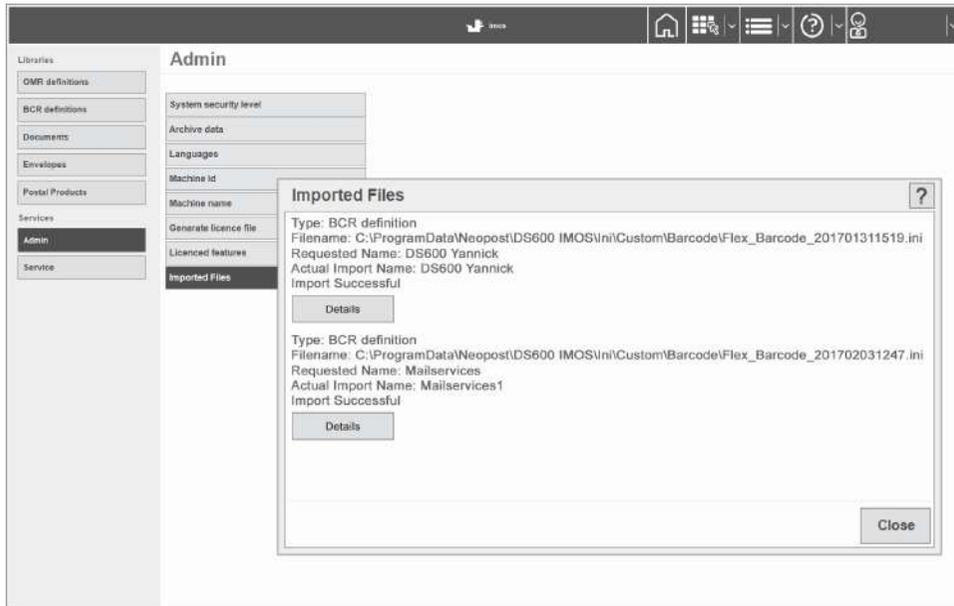
QTL-RND-SCR-00000164-A-00

Figure 3.12 – Imported files

> **!** Details are not shown if there are no files imported, or if no Flexbarcode licence on the machine.

3.2.3   Service Settings - Supervisor

Supervisor Service settings can be accessed by selecting '**Service**' under Services within the Menu screen as shown in Figure 3.13.
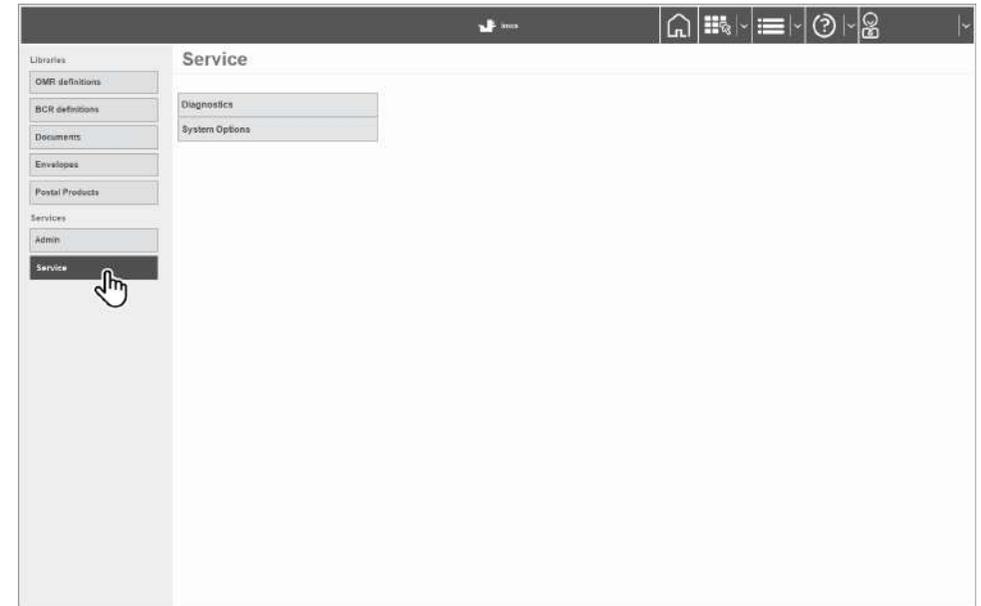
QTL-RND-SCR-00000113-A-00

Figure 3.13 – Supervisor Service settings

Supervisor Service settings allow access to the following functions and settings:

- Diagnostics
- System Options

> **!** You must be logged in as an Engineer to obtain full access to all available Service options.

3.2.3.1 Diagnostics

Diagnostics allows the Supervisor to access analog sensor calibration.

Analog sensors are those that respond over a graduated range, and are used to detect paper as it travels through the machine, unlike digital sensors which are read as either On or Off.

1. To adjust the analog sensors, select '**Diagnostics**' from the list of services, then select the '**Analog sensors**' tab at the top of the diagnostics screen.

2. Select the required unit needing sensor calibration, and press '**Ok**' once complete as shown in Figure 3.14.
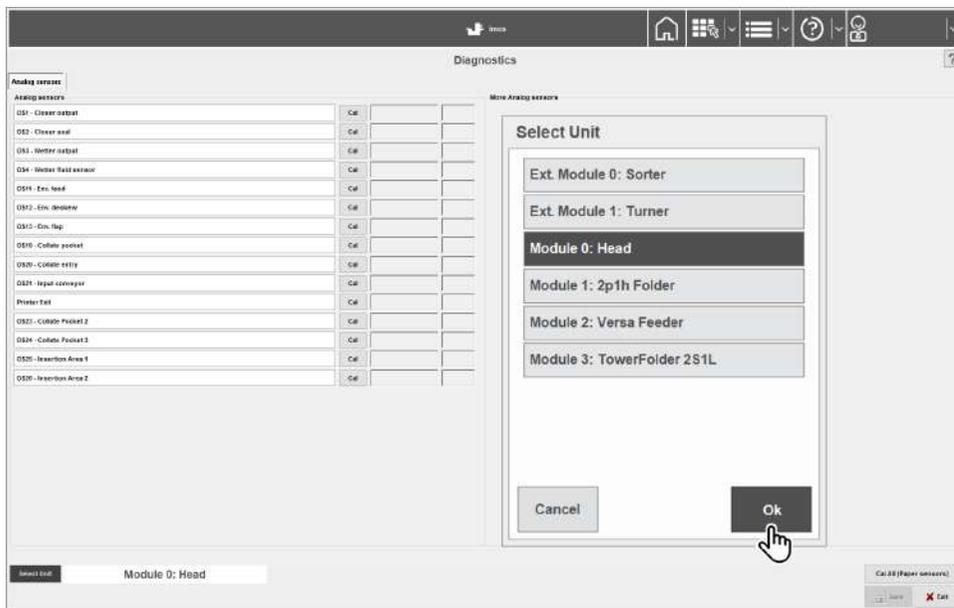
QTL-RND-SCR-00000452-A-00

Figure 3.14 – Selecting a unit for sensor calibration

3. Analog sensors can be calibrated individually or together by pressing the '**Cal All (Paper sensors)**' button in the bottom right corner of the screen.

4. Press '**Exit**' once the desired settings have been made.

Typical Sensor Values

Generally, readings are best used as a comparison guide for like sensors from one machine to another, however, if a sensor has failed, the readings are likely to be very low or zero.

Figure 3.15 shows an example of a typical analog sensor value, and translates as follows:

▪ '**T**' = Threshold voltage, generally over 2.5V (this is the switching voltage between blocked and clear)

▪ '**I**' = Effort of current required to read across the sensor halves (typically between 10% and 60%)

▪ '**R**' = Percentage of electronic potentiometer value on PCB

▪ '**C**' = clear, '**B**' = blocked
Typical sensor voltage values are **<0.5V for clear** and **>4.5V for blocked**.
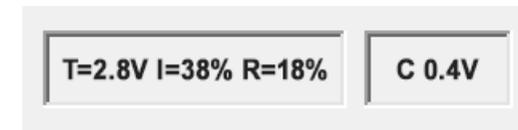
QTL-RND-SCR-00000174-A-00

Figure 3.15 – Example of a typical analog sensor value

Insert Head Analog sensors

Figure 3.16 shows typical analog sensor values for the Insert Head.

OS1 - Closer output	Cal	T=2.0V I=17% R=10%	C 0.1V
OS2 - Closer seal	Cal	T=2.8V I=17% R= 9%	C 0.5V
OS3 - Wetter output	Cal	T=2.8V I=61% R=18%	C 0.4V
OS4 - Wetter fluid sensor	Cal	T=2.0V	B 4.8V
OS11 - Env. feed	Cal	T=1.7V I=15% R= 9%	C 0.6V
OS12 - Env. deskew	Cal	T=2.7V I=17% R= 9%	C 0.6V
OS13 - Env. flap	Cal	T=2.6V I=28% R=12%	C 0.3V
OS19 - Collate pocket	Cal	T=2.7V I=30% R= 9%	C 0.5V
OS20 - Collate entry	Cal	T=2.7V I=25% R= 9%	C 0.5V
OS21 - Input conveyor	Cal	T=2.8V I=61% R=15%	C 0.5V
Printer Exit	Cal	T=2.8V R= 7%	C 0.6V
OS23 - Collate Pocket 2	Cal	T=2.8V I=61% R= 9%	C 0.5V
OS24 - Collate Pocket 3	Cal	T=2.7V I=39% R= 9%	C 0.2V
OS25 - Insertion Area 1	Cal	T=2.0V	C 4.9V
OS26 - Insertion Area 2	Cal	T=2.0V	C 4.9V

Select Unit   Module 0: Head

QTL-RND-SCR-00000128-A-00

Figure 3.16 – Insert Head typical analog sensor values

Versatile Feeder Analog sensors

Figure 3.17 shows typical analog sensor values for the Versatile Feeder.

OS2 - Track	Cal	T=2.7V I=26% R= 8%	C 0.4V
OS3 - Module exit	Cal	T=2.7V I= 4% R= 4%	C 0.4V
OS4 - Feed	Cal	T=2.8V I=20% R= 9%	C 0.6V
OS5 - Double document detect	Cal	T=2.8V I=12% R=10%	C 0.6V
DFC1 - DFC Hopper	Cal	T=0.0V I= 0% R= 0%	C 1.7V

Select Unit   Module 1: Versa Feeder

QTL-RND-SCR-00000165-A-00

Figure 3.17 – Versatile Feeder typical analog sensor values

Note:

Wetter fluid sensor will always show a typical value above 4.5V (Blocked) because it is detecting fluid.

Feeder Folder Analog sensors

Figure 3.18 shows typical analog sensor values for the Feeder Folder.

Analog sensors			
OS1 - Hopper loaded	Cal	T=2.0V I=25% R=10%	C 0.1V
OS2 - PreFeed	Cal	T=2.7V I=15% R= 8%	C 0.5V
OS3 - Deskew	Cal	T=2.7V I=20% R= 8%	C 0.4V
OS4 - Double document detect	Cal	T=2.8V I=15% R= 9%	C 0.3V
OS6 - Fold plate 1 pulse disk	Cal	T=2.0V	C 0.2V
OS7 - Fold plate 2 pulse disk	Cal	T=2.0V	B 4.7V
OS8 - Exit	Cal	T=2.8V I=15% R= 9%	C 0.6V
OS9 - Track	Cal	T=2.8V I=26% R= 9%	C 0.4V
OS10 - CIS Trigger	Cal	T=2.6V I= 4% R= 3%	C 0.3V

Select Unit   **Module 1: 2p1h Folder**

QTL-RND-SCR-00000453-A-00

Figure 3.18 – Feeder Folder typical analog sensor values

Tower Folder Analog sensors

Figure 3.19 shows typical analog sensor values for the Tower Folder.

Analog sensors			
OS2 - Hopper 1 pre-feed	Cal	T=2.7V I=19% R= 8%	C 0.5V
OS3 - Hopper 1 deskew	Cal	T=2.7V I=22% R= 9%	C 0.5V
DFC1 - Hopper 1	Cal	T=0.0V I= 0% R= 0%	C 1.0V
OS4 - Vertical path tracking 1	Cal	T=2.7V I=22% R= 9%	C 0.4V
OS6 - Hopper 2 pre-feed	Cal	T=2.7V I=15% R= 8%	C 0.5V
OS7 - Hopper 2 deskew	Cal	T=2.7V I=20% R= 8%	C 0.5V
DFC2 - Hopper 2	Cal	T=0.0V I= 0% R= 0%	C 1.2V
OS8 - Vertical path tracking 2	Cal	T=2.8V I=12% R= 8%	C 0.5V
OS10 - Hopper 3 pre-feed	Cal	T=2.7V I= 4% R= 6%	C 0.4V
OS11 - Hopper 3 deskew	Cal	T=2.8V I=20% R= 9%	C 0.6V
DFC3 - Hopper 3	Cal	T=0.0V I= 0% R= 0%	C 0.7V
OS12 - Vertical path tracking 3	Cal	T=2.7V I=57% R= 9%	C 0.5V
OS16 - Accumulator entry	Cal	T=2.8V I=15% R= 7%	C 0.5V
OS17 - Folder entry	Cal	T=2.8V I=23% R= 9%	C 0.6V
OS18 - Folder bypass	Cal	T=2.7V I=12% R= 9%	C 0.5V
OS19 - Folder exit	Cal	T=2.8V I=15% R= 7%	C 0.6V
OS20 - Module exit	Cal	T=2.8V I=33% R= 9%	C 0.5V
OS24 - Accumulator divert	Cal	T=2.0V R=10%	C 0.1V

Select Unit   **Module 2: TowerFolder 2S1L**

QTL-RND-SCR-00000166-A-00

Figure 3.19 – Tower Folder typical analog sensor values

Output Sorter Analog sensors

Figure 3.20 shows typical analog sensor values for the Output Sorter.
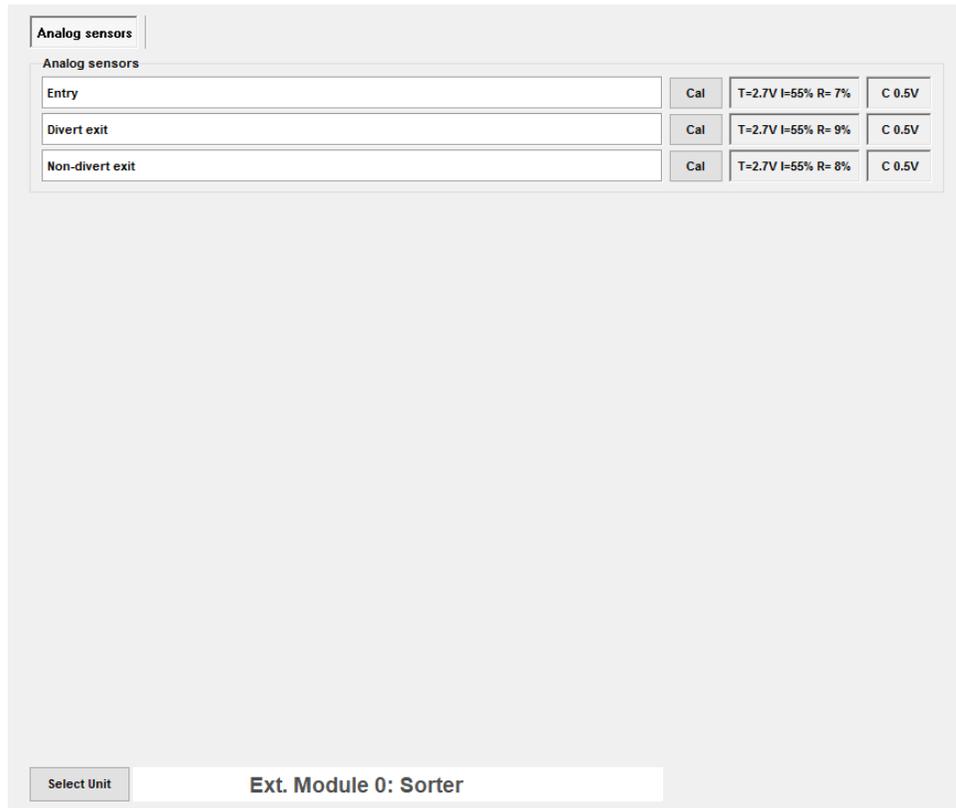
QTL-RND-SCR-00000167-A-00

Figure 3.20 – Output Sorter typical analog sensor values

Turner Analog sensors

Figure 3.21 shows typical analog sensor values for the Turner.
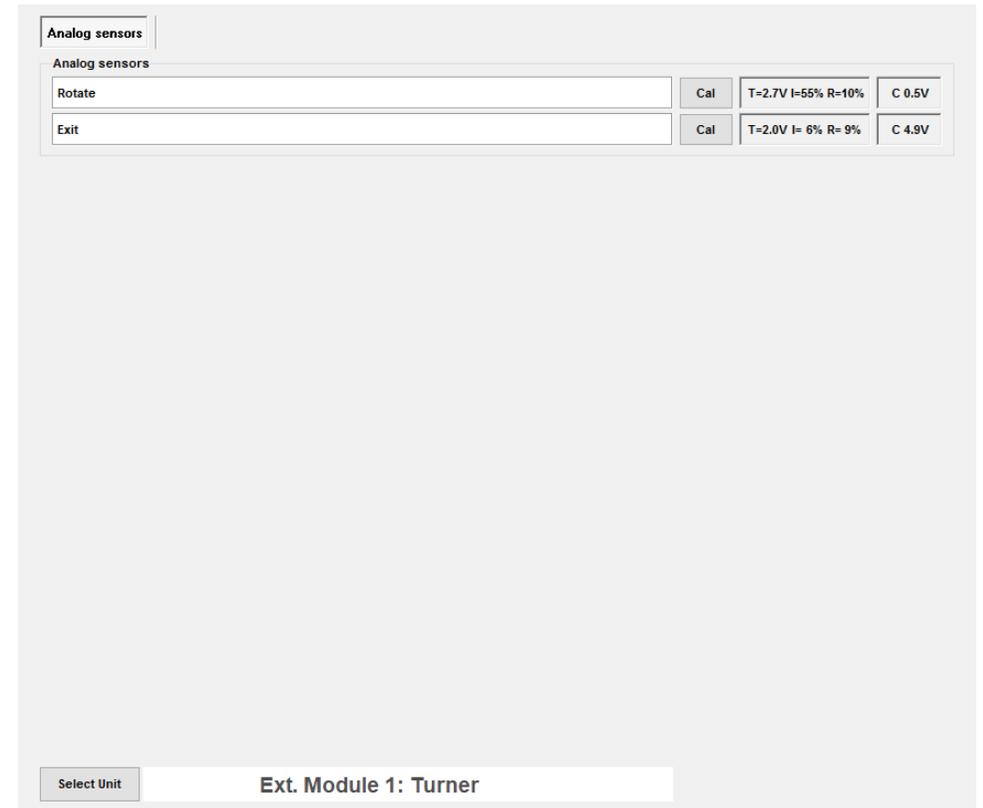
QTL-RND-SCR-00000168-A-00

Figure 3.21 – Turner typical analog sensor values

3.2.3.2   System Options

System Options allows the following system options to be set:

Disable Machine Idle Powerdown

- No

- Yes

  #### Note:

  If '**No**' is selected, the machine and PC will be set to automatically power-down after 60 minutes of idling (no activity), and when in an auto ended state.

Allow Custom fold selection

- No

- Yes

  #### Note:

  If '**Yes**' is selected, '**Custom Fold**' options will then be enabled and available for use within the Fold settings when creating a new job.

See section **4.4 Fold Settings** for further assistance.

CAN Type

Determines which type of Controller Area Network (CAN) interface device to be used.

- IXXAT

- Neopost

  #### Note:

  Default CAN type '**Neopost**' should be selected.

Remote Assistant Path

Sets the path to be used when accessing Remote Assistant.

Press '**Ok**' once complete as shown in Figure 3.22.
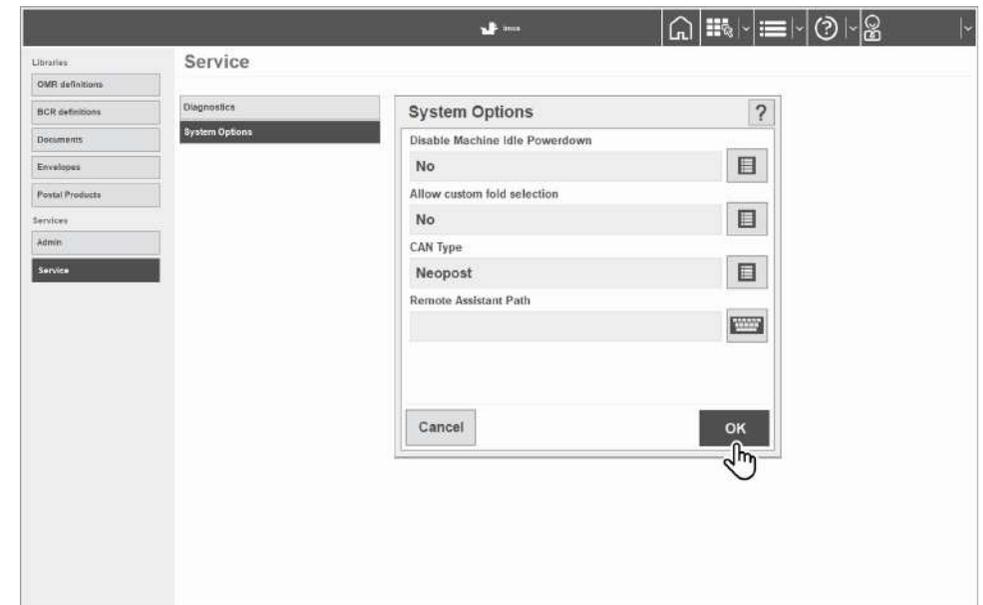
QTL-RND-SCR-00000115-A-00

Figure 3.22 – System options

3.3   Jobs Screen

The Jobs screen shown in Figure 3.23 is displayed once logged into IMOS, and may be accessed anytime by pressing the '**Jobs**' button in the IMOS control panel.

QTL-RND-SCR-00000454-A-00
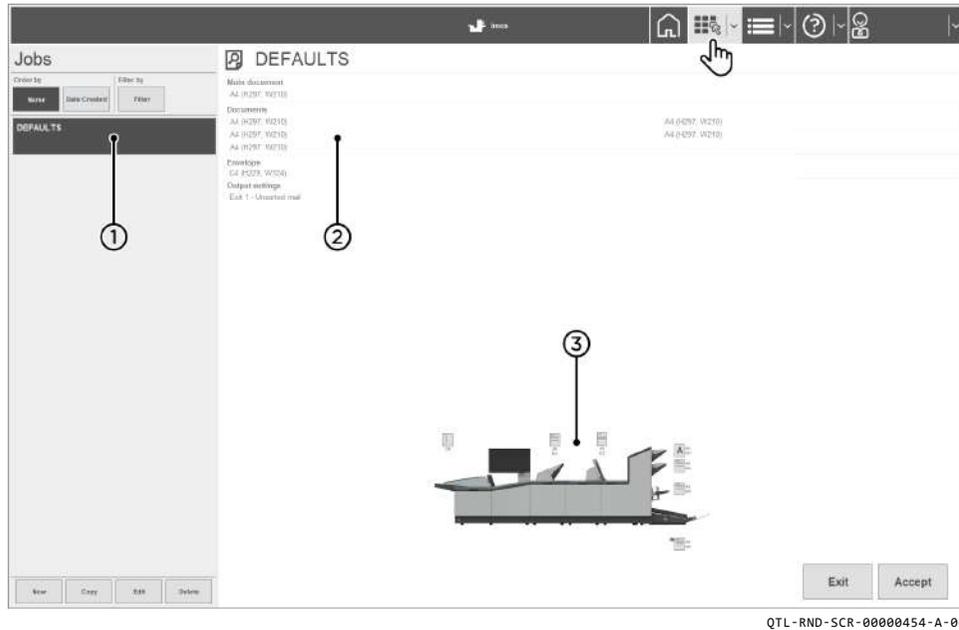
Figure 3.23 – Jobs screen

1.   Jobs list

2.   Job details panel

3.   Current machine configuration

The Jobs screen allows the user to select a job to run, create a new job, copy, edit or delete an existing job from the jobs list, depending on access rights.

> See section 5.3 Running a Job to run an existing job directly from the list of the IMOS Jobs screen.

3.4   Run Screen

The Run screen is displayed once a job has been accepted in the Jobs screen, or by pressing the '**Run**' button in the IMOS control panel indicated in Figure 3.24.

QTL-RND-SCR-00000455-A-00
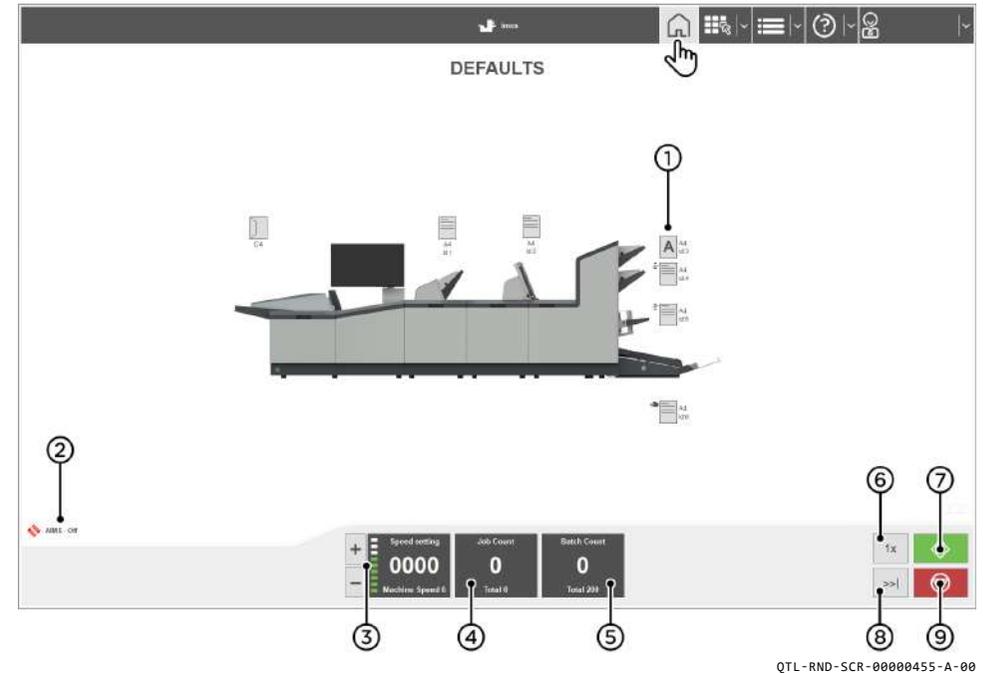
Figure 3.24 – Run screen

1.   Paper Load indicators

  ▪   Indicates to the operator the correct document/form/envelope type to be loaded into the various feed points (hoppers etc), and are displayed in yellow if the hopper is empty.

2.   AIMS Job indicator

  ▪   Indicates whether AIMS is enabled (ON or OFF) for the current job.

3.   Speed Control indicator

  ▪   Indicates the cycling speed (0-9) of the current job, press the '+' or '-' to increase or decrease the speed.

4.   Job Count indicator

▪   Indicates the current job count, and total job count of the current job, press anywhere inside the job count area to adjust the count settings.

> See section **3.4.2 Job Count Settings** for further information.

5.   Batch Count indicator

▪   Indicates the current batch count, and total count of the current job, press anywhere inside the batch count area to adjust the count settings.

> See section **3.4.3 Batch Count Settings** for further information.

6.   Single Cycle

▪   Allows various adjustments to be made before beginning the job.

> See section **3.4.1 Testing the Mailset** for further information.

7.   Run

▪   Runs or resumes the current job.

8.   Autoend

▪   Stops the machine after processing all documents in the paper path.

9.   Pause / Stop

▪   Pauses or stops the machine after processing the current envelope only.

3.4.1   Testing the Mailset

Options for testing the mailset as shown in Figure 3.25 may be accessed by pressing the '**Single Cycle**' button on the Run screen.
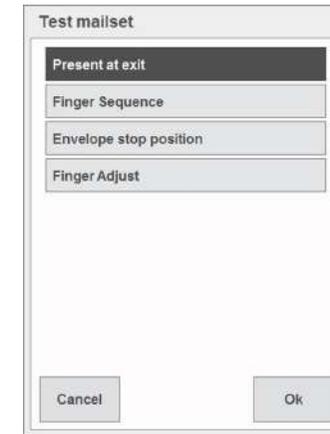
QTL-RND-SCR-00000056-A-00

Figure 3.25 – Test mailset

These options allow various adjustments to be made before beginning the job, in order to minimise insertion crashes.

> If the current job is programmed with AIMS, only '**Present at Exit**' will be enabled.

3.4.1.1   Present at Exit

Present at Exit allows the operator to check the contents of envelopes to determine if the correct and or amount of documents are fed, and to check the address alignment.

After pressing 'Present at exit', the first mail-piece will be processed and the machine will stop to allow the operator to adjust the vertical alignment of the address.

Remove the filled envelope and adjust as necessary, following the procedure as shown in Figure 3.26.

QTL-RND-SCR-00000057-A-00

Figure 3.26 – Present at exit options

3.4.1.2   Finger Sequence

After pressing 'Finger Sequence', the machine will feed an envelope into position.

This allows the operator to set the order of the insertion fingers in the envelope as demonstrated in Figure 3.27.
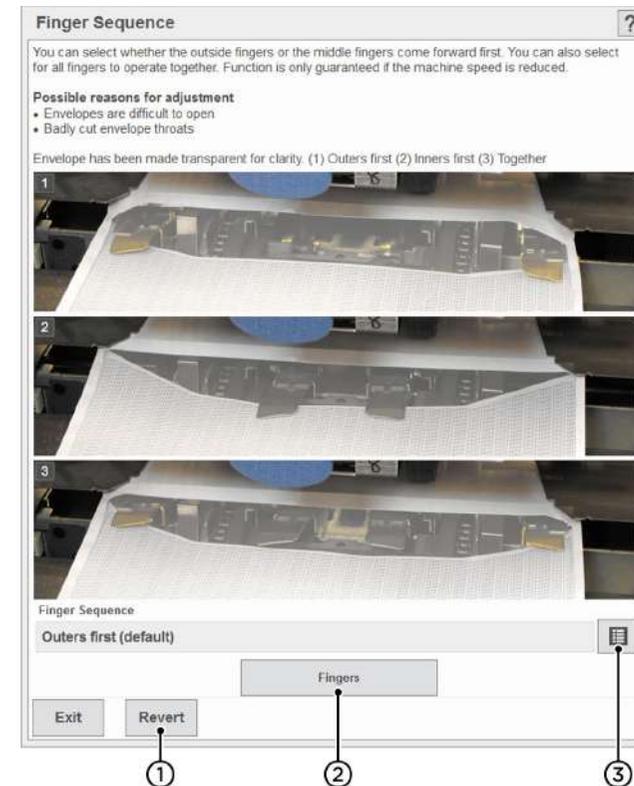
QTL-RND-SCR-00000456-A-00

Figure 3.27 – Finger Sequence

1.   Revert back to Default settings

2.   Operates fingers to view adjustments been made

3.   Finger sequence options

Make any adjustments as necessary by following the procedure below:

1. Open the operator side cover to view the fingers.

2. Select the required Finger Sequence from the list of options as shown in Figure 3.28 and press '**Ok**'.

QTL-RND-SCR-00000059-A-00
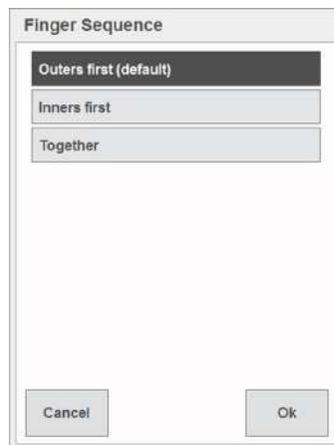
Figure 3.28 – Finger Sequence options

3. Press the '**Fingers**' button to operate the fingers and to view the insertion fingers adjustments in the envelope.

4. If required, press '**Revert**' to revert back to the original '**Outers first (default)**' finger sequence setting.

5. Press '**Exit**' once the desired settings have been made.

3.4.1.3   Envelope Stop Position

After pressing '**Envelope stop position**', the machine will feed an envelope into position.

This allows the operator to adjust the stop position of the envelope at insert as demonstrated in Figure 3.29.

QTL-RND-SCR-00000457-A-00
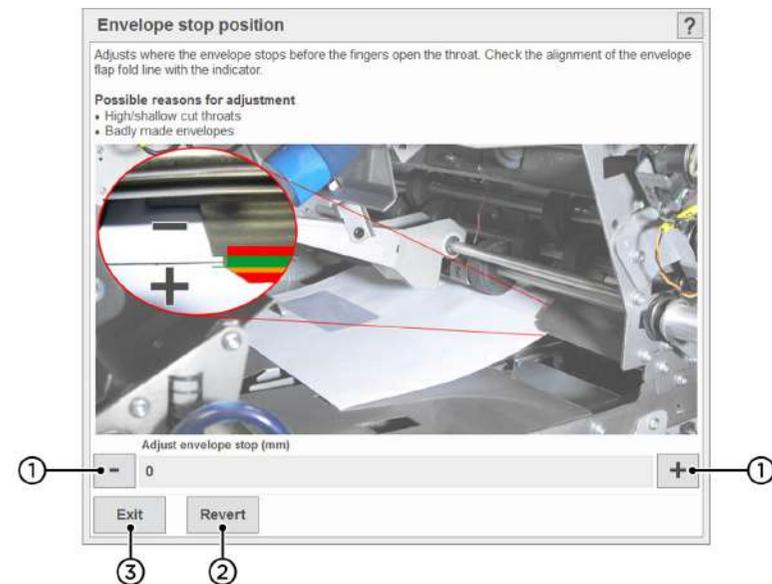
Figure 3.29 – Envelope stop position

Make any adjustments as necessary by following the procedure below:

1. Use the '**-**' or '**+**' button to adjust the position.

    Note:

    '**+**' Moves the envelope further into insert position, closer to the exit of the machine.

2. If required, press '**Revert**' to revert back to the default setting.

3. Press '**Exit**' once the desired settings have been made.

3.4.1.4   Finger Adjust

After pressing '**Finger Adjust**', the machine will feed an envelope into position.

This allows the operator to adjust the width of the outer fingers as demonstrated in Figure 3.30.

QTL-RND-SCR-00000458-A-00

Figure 3.30 – Finger Adjust

Make any adjustments as necessary by following the procedure below:

1. Adjust the width of the outer fingers, '**-**' button narrows the width, and '**+**' button widens the width of the fingers.

2. If required, press '**Revert**' to revert back to the default setting.

3. Press '**Exit**' once the desired settings have been made.

3.4.2   Job Count Settings

Pressing the '**Job Count**' button from the Run screen will display the Job Count settings as shown in Figure 3.31.
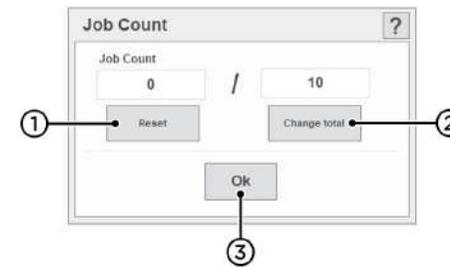
QTL-RND-SCR-00000459-A-00

Figure 3.31 – Job count settings

Note:

Current job count will display until the job has been changed, even if the machine has been switched off and back on again.

1. Press the '**Reset**' button to zero the count if required.

2. Press '**Change total**' to set the total for the job.

Note:

If the job count total is set at '**0**', the machine will run without stopping.

3. Press '**Ok**' once the desired settings have been made.

3.4.3   Batch Count Settings

Pressing the '**Batch Count**' button from the Run screen will display the Batch Count settings as shown in Figure 3.32.

QTL-RND-SCR-00000460-A-00
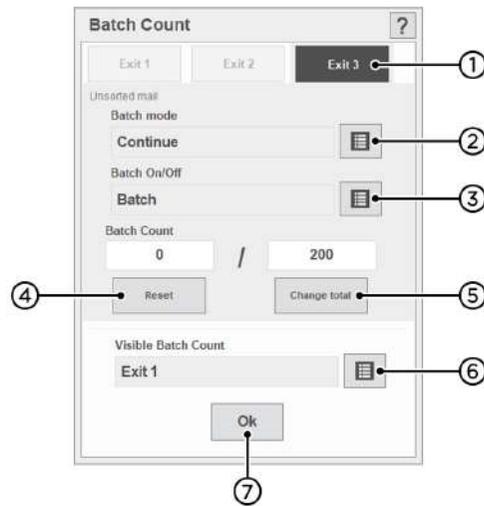
Figure 3.32 – Batch count settings

1.   Firstly, set the exit used for batching (if required).

   Note:

   Exits 2 & 3 appear only if Sorters are fitted.

2.   Set batch mode from the list of options:

   ▪   **Stop**
   ▪   **Continue**

   Note:

   '**Continue**' will pause the machine for the specified batch complete pause time, then resume, however the conveyor will continue to run during the pause time.

   '**Stop**' will stop the machine, press '**Run**' to resume.

3.   Set batch to '**Batch**' or '**Batch Off**'.

4.   Press the '**Reset**' button to zero the current count if required.

   Note:

   Current batch count will display until the job has been changed, even if the machine has been switched off and back on again.

5.   Press '**Change total**' to set the total for the job.

   Note:

   The total batch count number applies only to the selected exit (e.g. Exit 3).

6.   Press '**Visible Batch Count**' to set which exit is used for displaying the batch count on the Run screen.

7.   Press '**Ok**' once the desired settings have been made.

3.5   Help Menu

The Help menu can be accessed anytime by pressing the '**Help**' drop-down button in the IMOS control panel indicated in Figure 3.33.
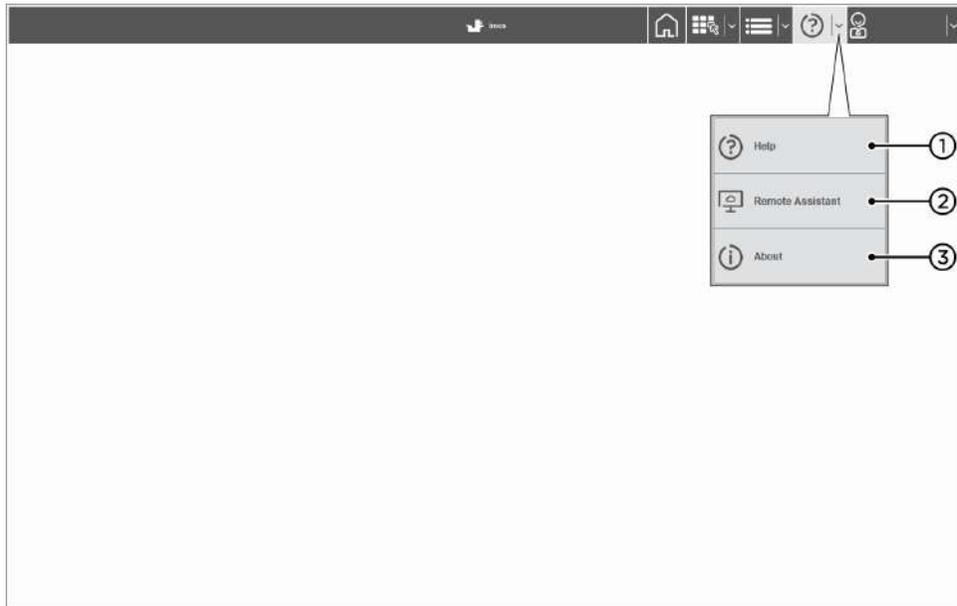
QTL-RND-SCR-00000461-A-00

Figure 3.33 – Help menu

The available options from the Help menu are as follows:

1. **Help**

- Accesses this user guide for further operator assistance topics.

3. **About**

- Displays information about the machine, software, and firmware etc.

3.6   Users Screen

The Users screen is accessed by pressing the '**Users**' button in the IMOS control panel indicated in Figure 3.35.
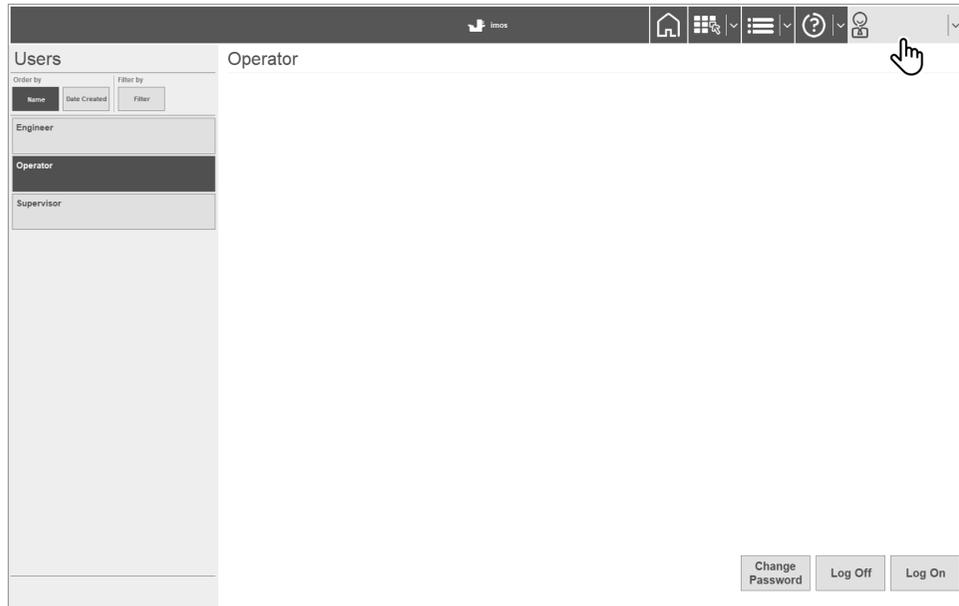
QTL-RND-SCR-00000008-A-00

Figure 3.35 – Users screen

3.6.1   Switching Users

To switch users, select the user from the users list and press '**Log On**', located in the bottom right corner of the Users screen.

Available functions and access rights will depend on who you log on as.

> ❗ Switching to an Engineer or Supervisor user requires a password.

The user will log on once a correct password has been entered using the on-screen keypad as shown in Figure 3.36.
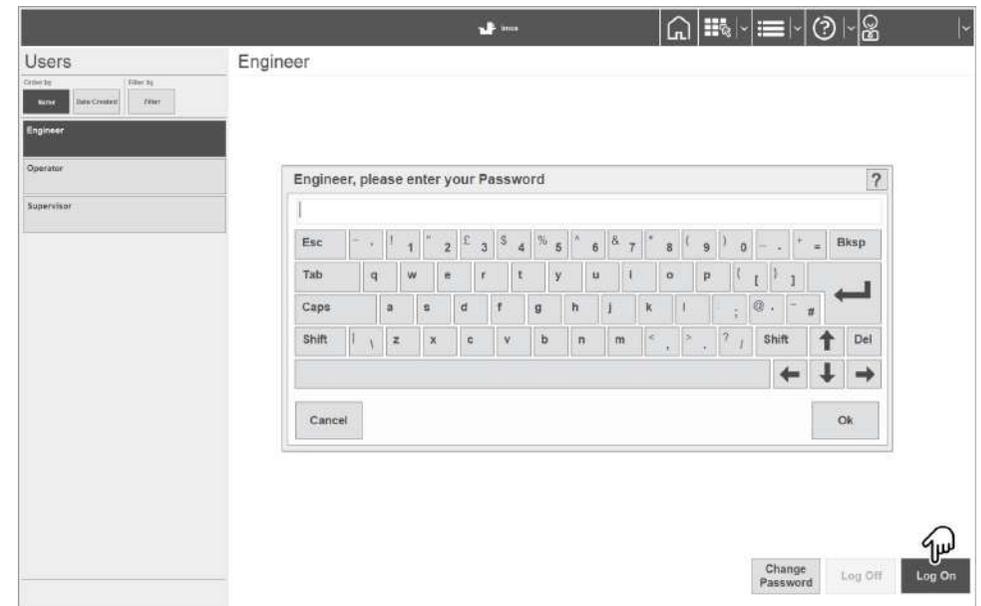
QTL-RND-SCR-00000009-A-00

Figure 3.36 – User Log on

3.6.2   User Access Rights

Users are allocated different levels of access rights to allow or disallow certain functions, e.g. change settings, libraries, hardware/unit setup etc. Access rights available to a specific user will depend on the user level. Three levels of access rights can be allocated to each user as shown in Table 3.2.

Access Rights	Operator	Expert Operator	Supervisor	Engineer
Change Jobs	✔	✔	✔	✔
Run Machine	✔	✔	✔	✔
Program Jobs with Wizard	✘	✔	✔	✔
Add to Libraries from Wizard	✘	▬	✔	✔
Add to Libraries from outside Wizard	✘	✘	✔	✔
Mechanical Fine Tuning	✘	✘	✔	✔
Document Fine Tuning	✘	✔	✔	✔
Service Menu Access	✘	✘	▬	✔
Admin Menu Access	✘	✘	✔	✘
PC Shut-down on Exit	✔	✔	✘	✘

Table 3.2 – User Access Rights

Note:

Expert Operator can only add envelopes and documents to Libraries from Wizard.

Supervisor only has access to Diagnostics for Sensors, and System Options within the Service Menu.

! User access rights can be created or modified only if logged in at the appropriate user level.

📄 System Security Levels can be set in Admin settings from the Menu screen. See section 3.2.2.1 System Security Level for further information.

3.7   IMOS F-Keys

F-Key functions can be used to access certain tasks within IMOS depending on the user type logged on.

Access permissions to F-Key functions available to each user type is shown in Table 3.3.

F-Key	Functions	Operator	Expert Operator	Supervisor	Engineer
F1	Help / Documentation Main Menu	✔	✔	✔	✔
F2	General Information	✘	✘	✔	✔
F3	Capture Trace	✔	✔	✔	✔
F4	Envelope Batching / Job & Divert Counters	✔	✔	✔	✔
F5	Send Job / Burn in / Clear & Restart Machine / CAN Special / Reset Machine	✘	✘	✔	✔
F6	Envelope Only / Reset CAN / Trace CAN / Test AIMS / Reset COM / Clear Faults	✘	✘	✔	✔
F7	Output Information	✘	✘	✔	✔
F8	Input Information	✘	✘	✔	✔
F9	Debug Information	✔	✔	✔	✔
F10	Not used	▬	▬	▬	▬
F11	Not used	▬	▬	▬	▬
F12	Not used	▬	▬	▬	▬

Table 3.3 – F-Key Functions

Note:

F10, F11, and F12 Keys are currently not used for any function on 7700 Series machines.

3.7.1   F1 Key

Press '**F1**' to access the machine Operator documentation.

3.7.2   F2 Key

Press '**F2**' to view General Information of the machine as shown in Figure 3.37.

QTL-RND-SCR-00000117-A-00

Figure 3.37 – F2 Key function

QTL-RND-SCR-00000462-A-00
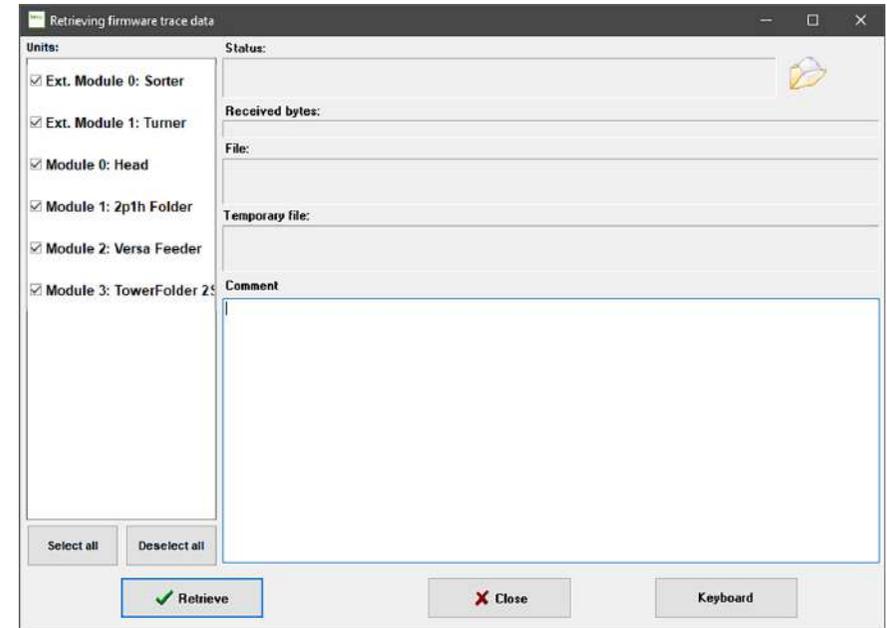
Figure 3.39 – Capture Trace Data

3.7.3   F3 Key

Press '**F3**' to access the following F3 Key functions as shown in Figure 3.38.

QTL-RND-SCR-00000118-A-00

Figure 3.38 – F3 Key functions

▪ **Capture Trace** - Allows the retrieval of firmware trace data for selected units as shown in Figure 3.39.

3.7.4   F4 Key

Press '**F4**' to show the Batch, Jog, and Divert counters as shown in Figure 3.40.

QTL-RND-SCR-00000120-A-00

Figure 3.40 – F4 Key function

3.7.5   F5 Key

Press '**F5**' to access the following Engineer and Factory F5 Key functions as shown in Figure 3.41.

QTL-RND-SCR-00000121-A-00
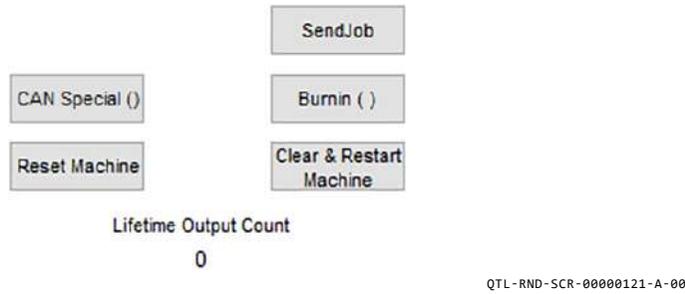
Figure 3.41 – F5 Key functions

3.7.6   F6 Key

Press '**F6**' to access the following Diagnostics F6 Key functions used by Factory R&D and Field Technicians as shown in Figure 3.42.

QTL-RND-SCR-00000122-A-00
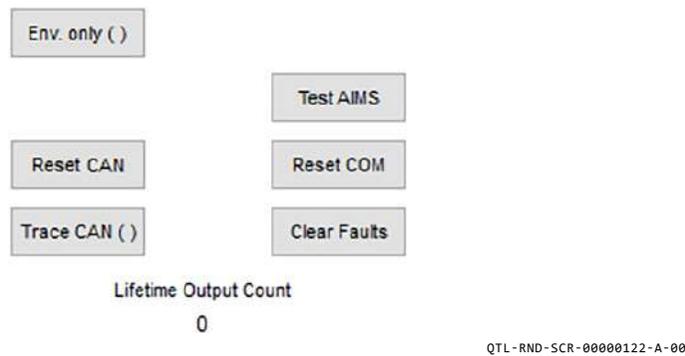
Figure 3.42 – F6 Key functions

Note:

'**Envelope Only**' mode is used for diagnostics only.

3.7.7   F7 Key

Press '**F7**' to view Output log information of mail pieces as they reach the output of the machine as shown in Figure 3.43.

QTL-RND-SCR-00000123-A-00
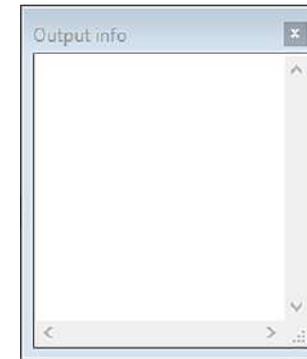
Figure 3.43 – F7 Key function

3.7.8   F8 Key

Press '**F8**' to view Input log information of mail pieces at the input of the machine as shown in Figure 3.44.

QTL-RND-SCR-00000124-A-00
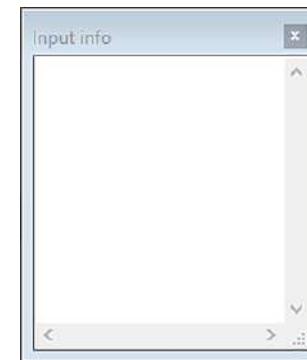
Figure 3.44 – F8 Key function

3.7.9   F9 Key

Press '**F9**' to access Debug information used by Factory R&D and Field Technicians as shown in Figure 3.45.
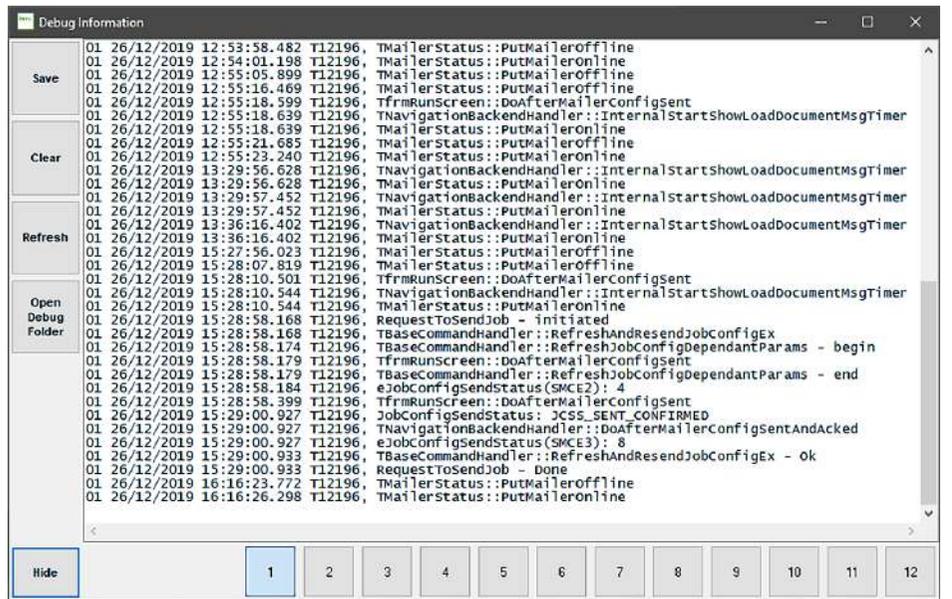
QTL-RND-SCR-00000125-A-00

Figure 3.45 – F9 Key function

Operator IMOS Settings **4**

4.1   Creating a Job

Before creating a job, settings must first be defined for the following:

- **Define Mailset** (Envelope, Document, and Enclosures)
- **Place Mailset**
- **Fold Settings**
- **Mail Sorting**
- **Output Placement**
- **Output Settings**
- **Saving the Job**

When defining the Document, BCR or OMR, definitions can be optionally enabled.

Note:

To use a Barcode definition, it must exist as part of the defined document mailset.

See section 4.2.4 Creating a New Document for further assistance.

4.2   Define Mailset

To begin defining the mailset, press '**New**' in the Jobs screen as shown in Figure 4.1.

QTL-RND-SCR-00000463-A-00

Figure 4.1 – Defining the mailset

4.2.1   Envelope Mailset

1.   To select an existing envelope for the mailset, press '**Select**' to open the Envelopes selection box, then select the required envelope from the list and press '**OK**' as shown in Figure 4.2.
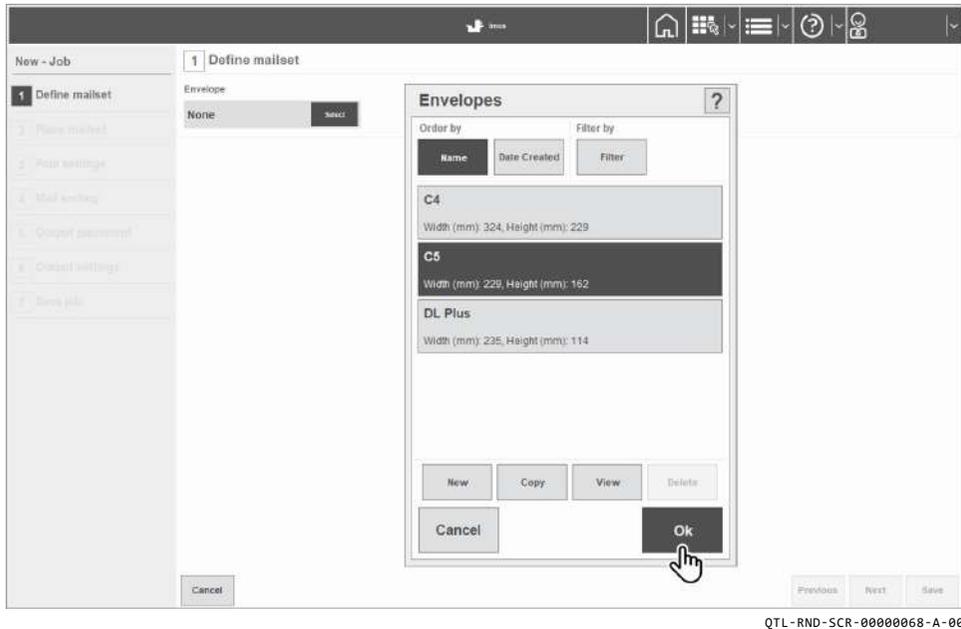
Figure 4.2 – Defining the envelope type

2.   If required, press '**Settings**' to define the envelope usage (Seal mode) as shown in Figure 4.3.

QTL-RND-SCR-00000069-A-00
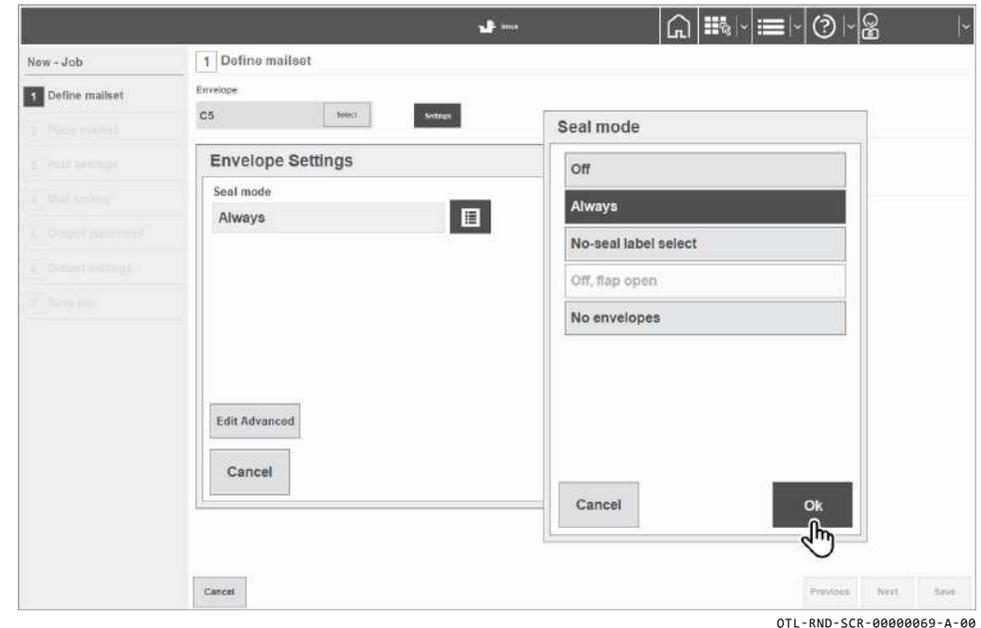
Figure 4.3 – Defining the envelope usage

3.   Select the required Seal mode from the list (default set to '**Always**').

4.   Other options include the following:

   - **Off** - Envelope is left unsealed with flap closed

   - **No-seal label select** - Reads no-seal character in label

   - **Off, flap open** - Envelope is left unsealed with flap open (not available if an Output Sorter is fitted)

   - **No envelopes** - Envelope feeding is disabled to allow forms only

5.   Press '**Ok**' once the desired settings have been made.

4.2.1.1   Advanced Envelope Mailset Settings

1. Press '**Edit Advanced**' to set the order of documents inserted into the envelope as shown in Figure 4.4.
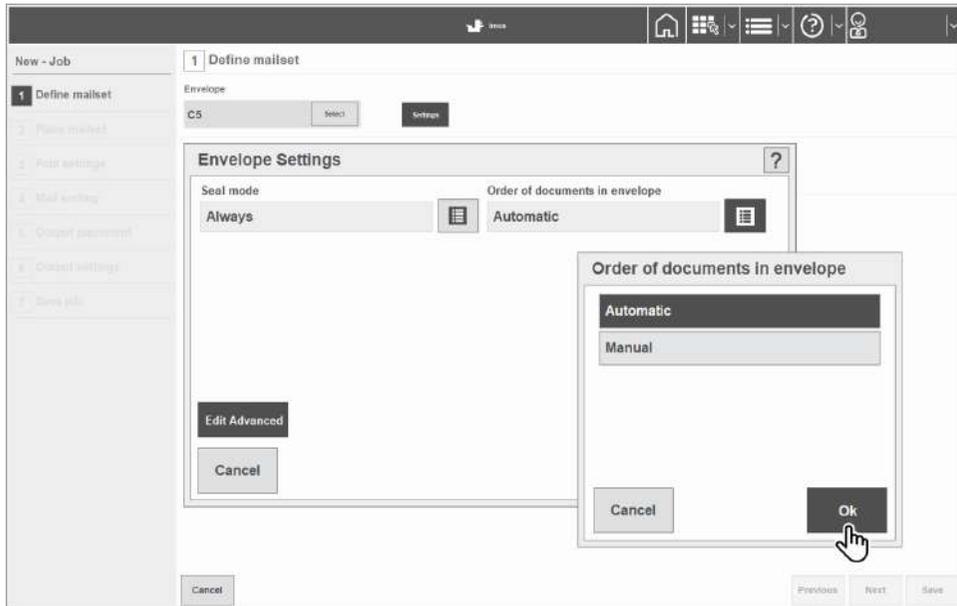
QTL-RND-SCR-00000070-A-00

Figure 4.4 – Setting the order of documents inserted into the envelope

2. Select the required order that documents are inserted into the envelope from the list (default set to '**Automatic**').

    Note:

    If the order is set to '**Manual**', documents are inserted in the order created in the job. Document Order is not available when reading.

4.2.2   Creating a New Envelope

1. To create a new envelope for the mailset, press '**Select**' to open the Envelopes selection box, then press '**New**' as shown in Figure 4.5.
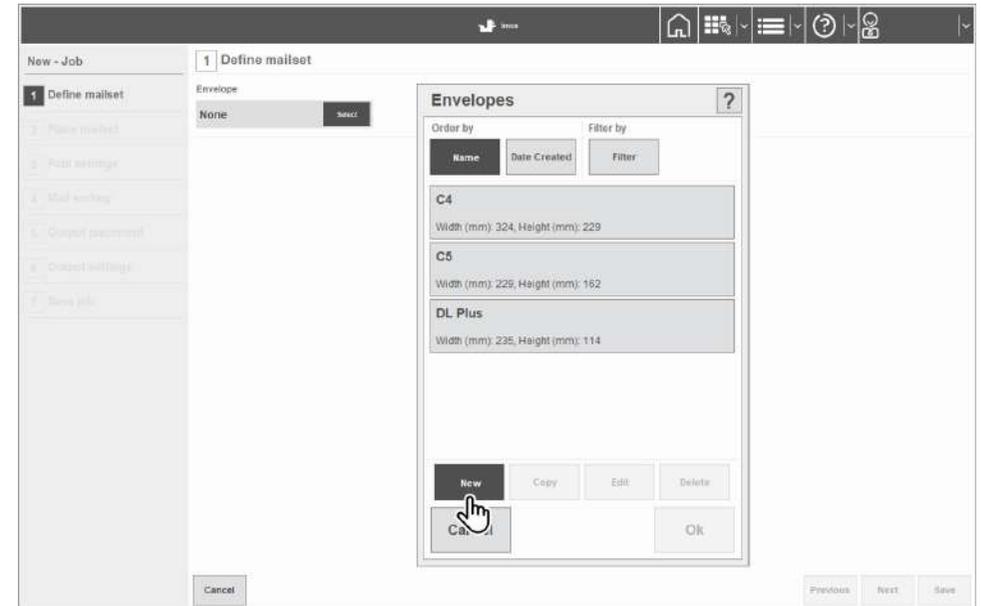
QTL-RND-SCR-00000093-A-00

Figure 4.5 – Creating a new envelope

2. Confirm the new envelope creation process by pressing '**Yes**' in the confirmation dialog box.

3. Enter an envelope name.

4. Select an envelope size. If the default dimensions change, the size will change to '**Custom**'.

> ⚠ Measure envelopes for the required job carefully before changing the size.

5. When entering the paper weight (gsm), the true weight (g) will automatically be calculated by default as shown in Figure 4.6.

QTL-RND-SCR-00000094-A-00

Figure 4.6 – New envelope options

6. If required, deselect '**Computed**' and enter an actual '**True weight**' figure.

7. Enter a '**Wetting rate**' number as required, default is set to 15.

Note:

Wetting rate number is the quantity of envelopes sealed before the wetter tank is topped up.

8. Enter a '**Max pack thickness**' as required.

Note:

10mm maximum pack thickness.

9. Press '**Save**' once the desired settings have been made.

Users with appropriate access rights can also create Envelopes (following the same procedures), from the Libraries within the Menu Screen.

4.2.3   Document Mailset

1. To select an existing document for the mailset, press '**Select**' to choose a document type from the library, then select the required document from the list and press '**OK**' as shown in Figure 4.7.

QTL-RND-SCR-00000071-A-00

Figure 4.7 – Defining the document type

2. If required, press '**Settings**' to define the document usage (Form count, Cascading, and Hopper feed mode) as shown in Figure 4.8.

QTL-RND-SCR-00000072-A-00
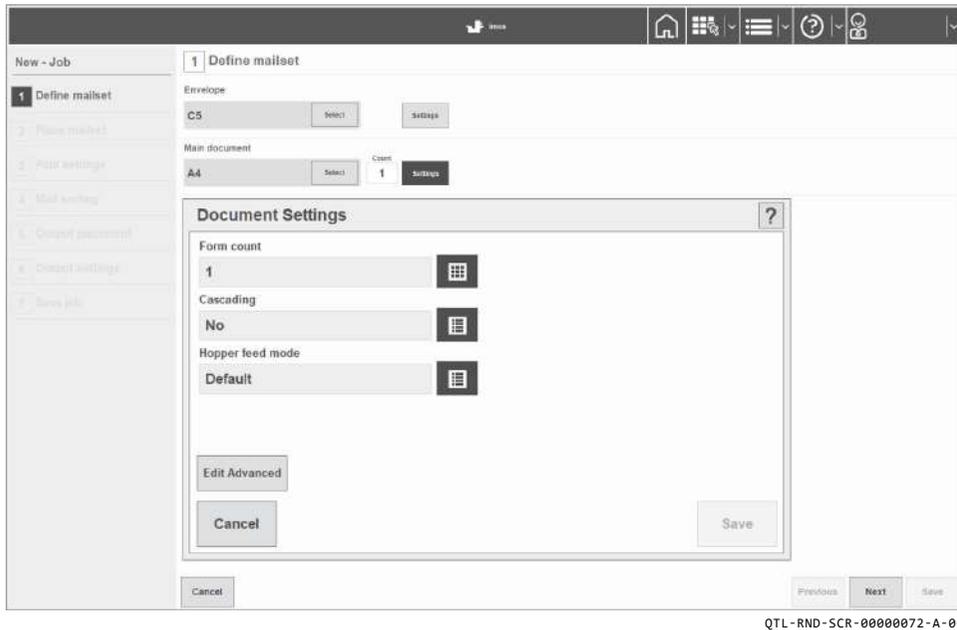
Figure 4.8 – Defining the document usage

3. Enter the '**Form count**' number for multiples in the dialog box.

4. If Cascading is required, select '**Yes**' from the list of options shown in Figure 4.9.

    Note:

    Cascading informs the machine to switch hoppers, allowing '**all available**' hoppers loaded with the same document type to be used.

    ▪ Maximum of 2 x adjacent hoppers from Versatile Feeders

    ▪ Maximum of 2 x adjacent hoppers from Feeder Folders

    ▪ Maximum of 3 x mark reading hoppers from a Tower Folder

    ▪ Maximum of 4 x non-reading hoppers from a Tower Folder
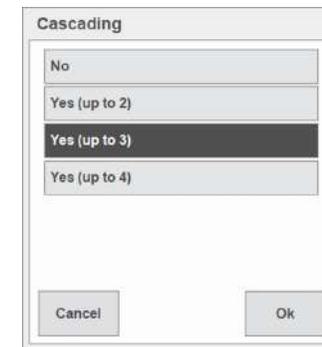
QTL-RND-SCR-00000160-A-00

Figure 4.9 – Cascading options

The selected number (e.g. '**up to 2**, **3**, or **4**') will depend upon machine configuration, and also what document/enclosure types have been selected for each hopper.

See section 5.3.3 Cascading Job for further assistance in running a job enabled for cascading.

5. Select the '**Hopper feed mode**' from the list.

    ▪ **Default** - Informs the machine to automatically feed until the hopper is empty.

    ▪ **Daily mail** - Hand-feed.

See section 5.3.4 Daily Mail for further assistance.

6. Press '**Save**' once the desired settings have been made.

4.2.3.1   Advanced Document Mailset Settings

1. Press '**Edit Advanced**' as shown in Figure 4.10 for advanced document settings.
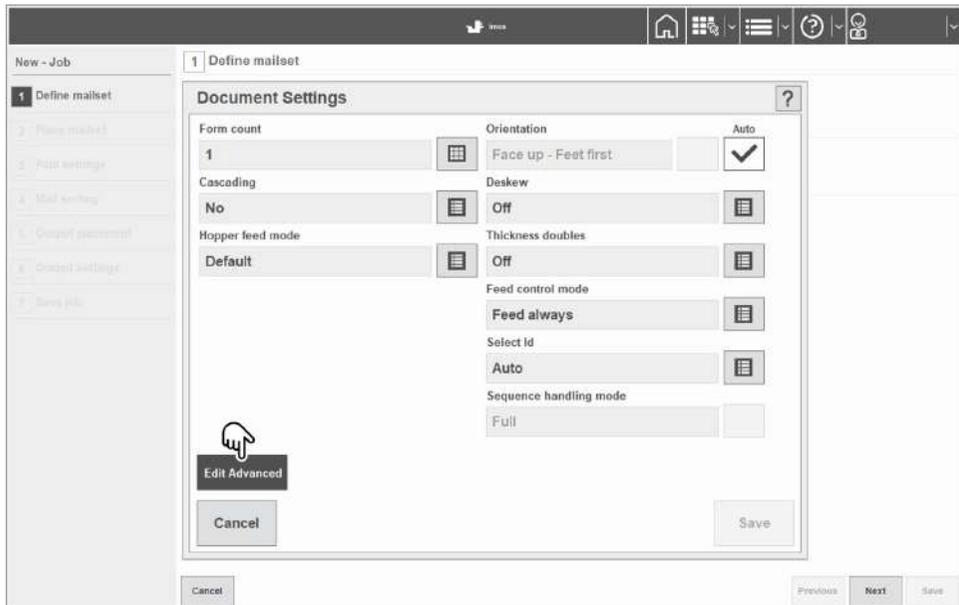
QTL-RND-SCR-00000073-A-00

Figure 4.10 – Advanced document settings

2. Edit the following advanced document settings as required:

Orientation

Press '**Auto**' to select a feeding orientation from the list other than the default setting '**Face up - Feet first**'.

See section 5.1.4.8 Reading Orientations for further assistance.

Do not select the '**Auto**' orientation option again once the change has been successfully made.

Deskew

▪   **Off** - Off is selected by default if running via the accumulator.

▪   **Low** - Select Low if skewing occurs.

▪   **High** - Select High if a large amount of skew is noticeable, however this will slow the machine speed.

Thickness Doubles

Change default setting only if needed.

▪   **Off**

▪   **On (auto)**

▪   **On (optical)**

▪   **On (mechanical)**

Note:

The Tower Folder only has 'Off' or 'On (mechanical)' as an available setting for Thickness Doubles.

Feed Control Mode

▪   **Feed Always** - Used for non-selective documents.

▪   **Selective Feed** - Used for reading-enabled units. Works in conjunction with Select Id.

Select Id

Defines an identification number for a document in accordance with the select mark in the label. This will then feed the document when that mark is read (applies to enclosures only).

Sequence Handling Mode

Determines how sequence marks (if used) are handled when a document set is broken up (e.g. to change a job in the middle of a document set).

Set to '**Full**' for the first pass, then change to '**Mailset**' for the second pass after the job has been changed. The machine will then expect a broken sequence.

4.2.4 Creating a New Document

1. To create a new document for the mailset, press '**Select**' to open the Documents selection box, then press '**New**' as shown in Figure 4.11.
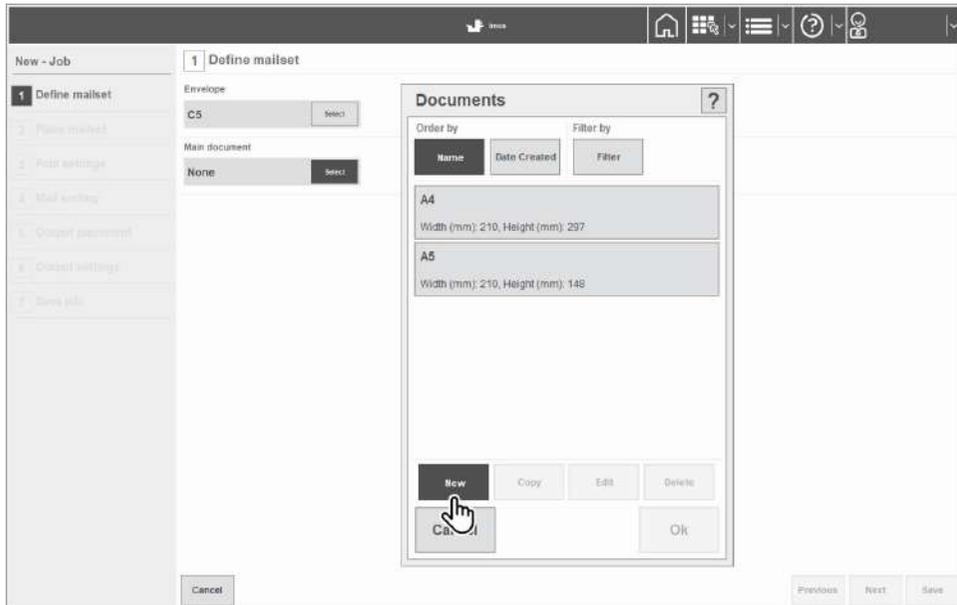
QTL-RND-SCR-00000095-A-00

Figure 4.11 – Creating a new document

2. Confirm the new document creation process by pressing '**Yes**' in the confirmation dialog box.

3. Enter any relevant settings as required:

Document name

Select the keyboard icon and enter a name using either the physical or virtual keyboard.

Form Type

Select a form type as required.

- **General type**
- **Booklet**
- **BRE / SAE**

Note:

The correct orientation '**Face up - Head first**' must be used for Business Reply Envelopes (BRE), or Stamped Addressed Envelopes (SAE).

Size

Select a document / form size as required.

- **Custom**
- **A4**
- **A5**
- **B5**
- **Letter**

Note:

The default dimensions (height and width) will automatically be displayed when a document / form size has been selected.

Print orientation

Select a print orientation as required.

- **Portrait**
- **Landscape**

Height (mm) / Width (mm)

The default dimensions (height and width) will automatically be displayed when a document / form type has been selected.

Note:

If the default dimensions are changed (modified) manually, the size of the document will change to '**Custom**'.

Address position

Select the address position as required.

- **None**
- **Top**
- **Middle**
- **Bottom**

   Note:

   The default position is set to '**Top**', specify the position ('**Middle**', '**Bottom**', '**None**' etc.) if required.

Paper type

Select the paper type as required.

- **Standard**
- **Glossy**

Foldable

Specify whether the document is to be folded or not (eg. a booklet would not need to be folded).

Paper weight (gsm) / Thickness (mm) / True weight (g)

   Note:

   When entering the paper weight (gsm), the true weight (g) will automatically be calculated by default. If required, deselect '**Computed**' and enter an actual '**Thickness**' and '**True weight**' figure.

BCR definition / OMR definition

Select a '**BCR definition**' or '**OMR definition**' from the list as required when using BCR or OMR marked documents.

   ! Reading capabilities are obtained under licence as an option, and must already exist on the machine.

Select '**Region of Interest**' as shown in Figure 4.12 to specify the label position.
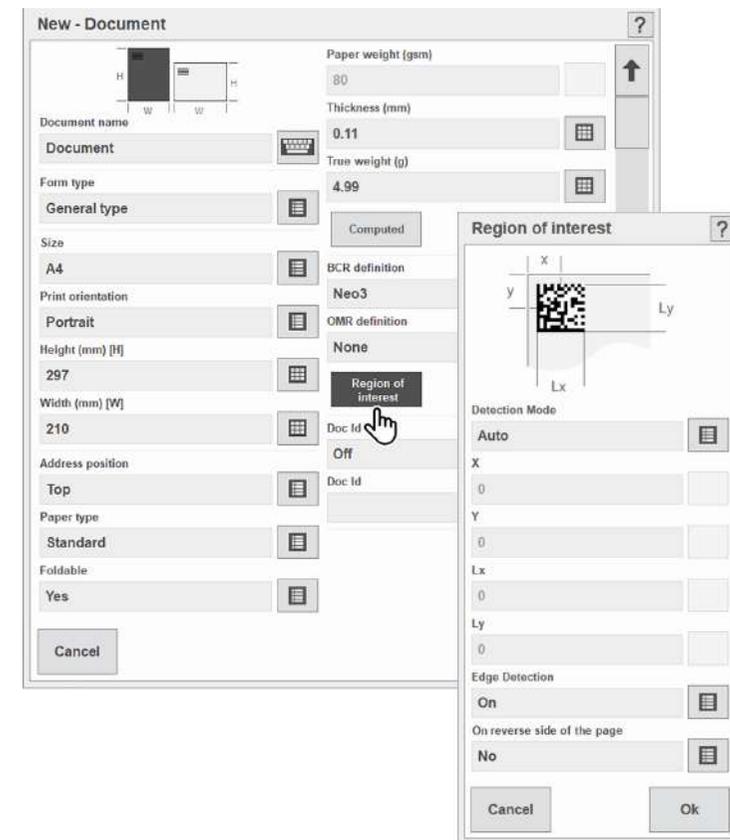
QTL-RND-SCR-00000469-A-00

Figure 4.12 – Region of Interest document options

Note:

Label positions specified in 'Region of Interest' are relative to the top left-hand corner of the document 'Print orientation' (i.e. Portrait or Landscape) selected within the New-Document screen.

A. Select the Detection Mode when viewed as read.

  ▪ If '**Auto**' Detection Mode is selected, you will be prompted to indicate which side of the paper width the label is located - its position will then be automatically detected, or allow the correct barcode to be selected if multiple codes are detected.

Note:

'**Auto**' Detection mode is not available for OMR.

  ▪ If '**Manual**' is selected, enter the label size and position as shown on the display.

B. Edge detection should be turned '**On**', as it determines the edge of the document to give a precise area the marks are in.

C. Select On the reverse side of the paper if required.

  ▪ If the OMR/Barcode label is on the reverse side of the document, the label is programmed in the same way. The region of interest is measured relative to the top left corner of the document when viewed from the label side. Ticking the box tells the machine that the label is not on the Face side of the document and forces it to calculate the Region of interest as it is being run, and how any sequences should run.

D. Press '**Ok**' once the Region of Interest settings are complete.

Doc Id

If '**Doc Id mode**' is to be used, select '**On**'. This reads a label character and compares its string value with the string entered in '**Doc Id**' to confirm that the correct document type is used.

4. Press '**Save**' once the desired settings have been made.

For further assistance on BCR definitions and OMR definitions, see section **8.9 Reading Specifications**

Users with appropriate access rights can also create Documents (following the same procedures), from the Libraries within the Menu Screen.

4.2.5   Enclosure Mailset

1. To select an existing enclosure for the mailset, press '**Select**' to choose an enclosure type from the library, then select the required document from the list and press '**OK**' as shown in Figure 4.13.
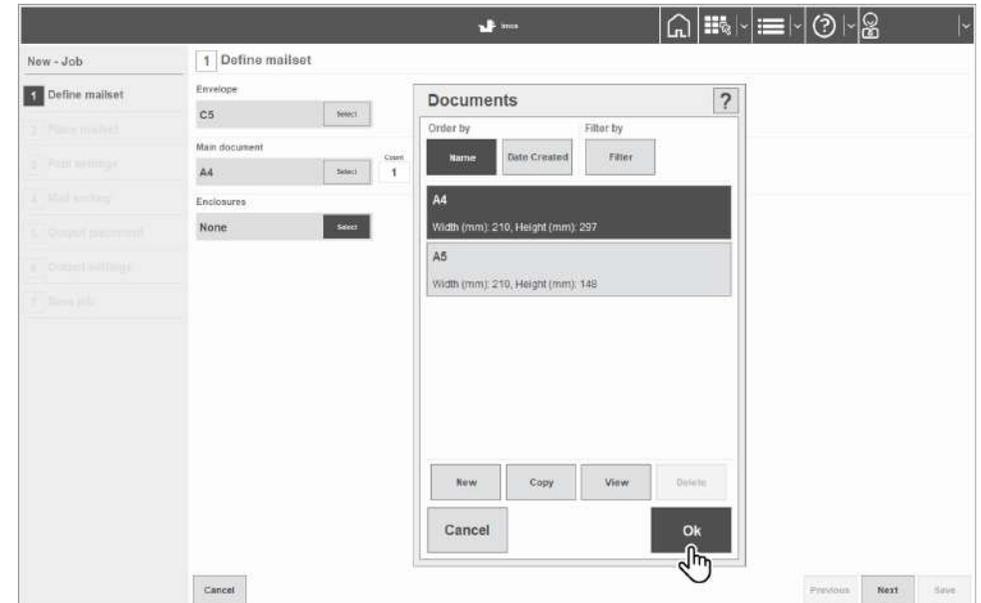
QTL-RND-SCR-00000074-A-00

Figure 4.13 – Defining the enclosure type

The remainder of the setup process for Enclosures is the same as Documents.

See section **4.2.3 Document Mailset** for further assistance.

2. Press '**Next**' once the desired settings have been made.

4.2.6   Creating a New Enclosure

The creation process for new Enclosures is the same as new Documents.

> 📄 See section 4.2.4 Creating a New Document for further assistance.

4.3   Place Mailset

Only define the placement of documents if you want to assign documents/enclosures to specific hoppers.

1.   To define a document placement, select the document to move, then select the hopper to assign it to as shown in Figure 4.14.
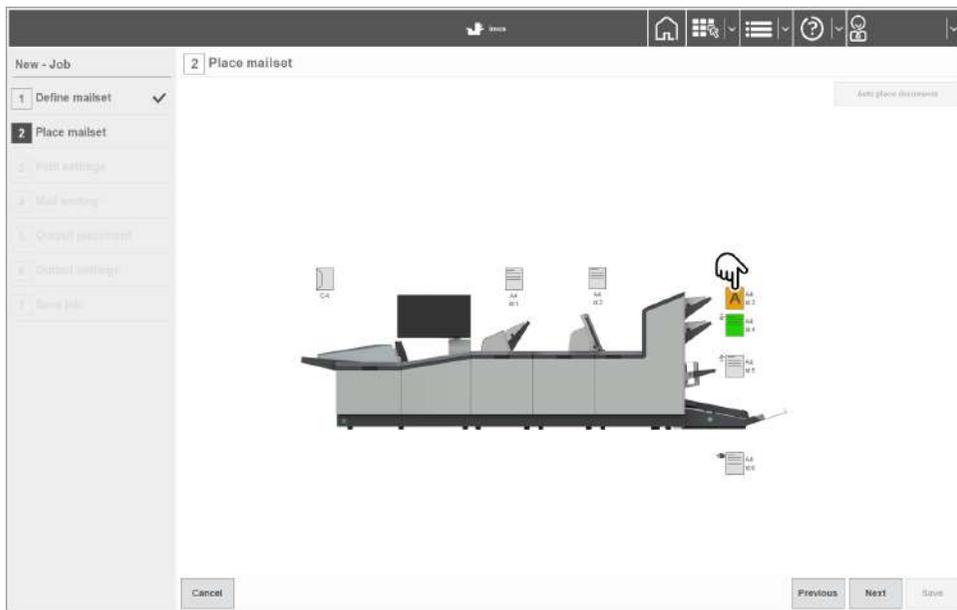
QTL-RND-SCR-00000464-A-00

Figure 4.14 – Place mailset

2.   To revert back to the default settings, press '**Auto place documents**'

3.   Press '**Next**' once the desired settings have been made.

4.4   Fold Settings

The machine automatically selects the optimum fold type.

1.   To change the fold type, deselect '**Auto Fold Type**' and select the required type from the list as shown in Figure 4.15.
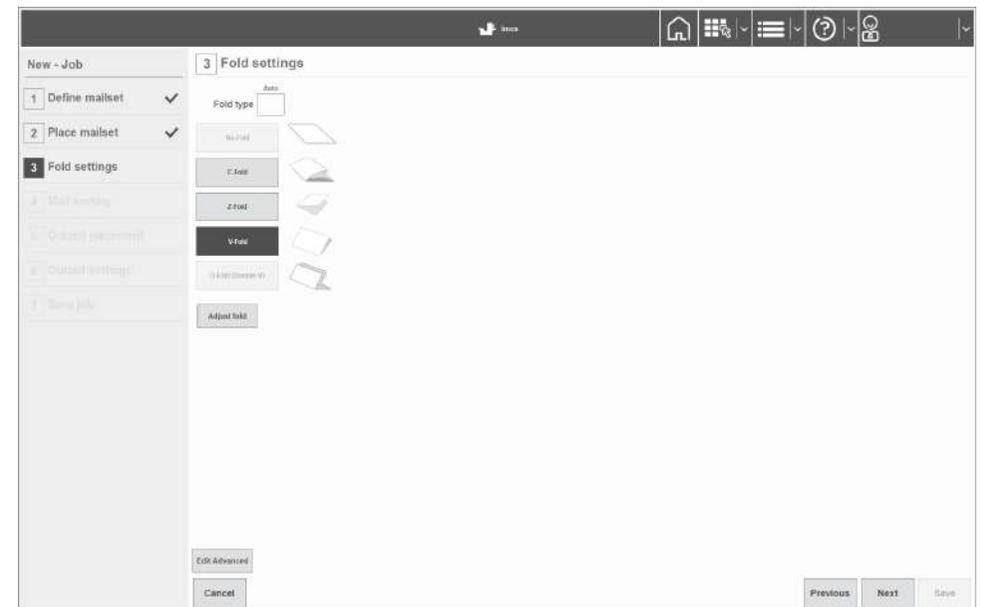
QTL-RND-SCR-00000076-A-00

Figure 4.15 – Selecting the Fold type

> ⚠ Selecting incorrect or incompatible fold types for the defined document/enclosure can produce errors and cause the machine to malfunction.

2. Press '**Adjust fold**' to adjust the fold or to check the fold lengths.

    ### Note:

    Adjust Fold disables '**Address Adjust**' when the job is running.

    > See section **3.4.1 Testing the Mailset** for further assistance.

    > See section **3.4.1.1 Present at Exit** for further assistance.

3. To see the fold plate lengths, press '**Advanced**' as shown in Figure 4.16.
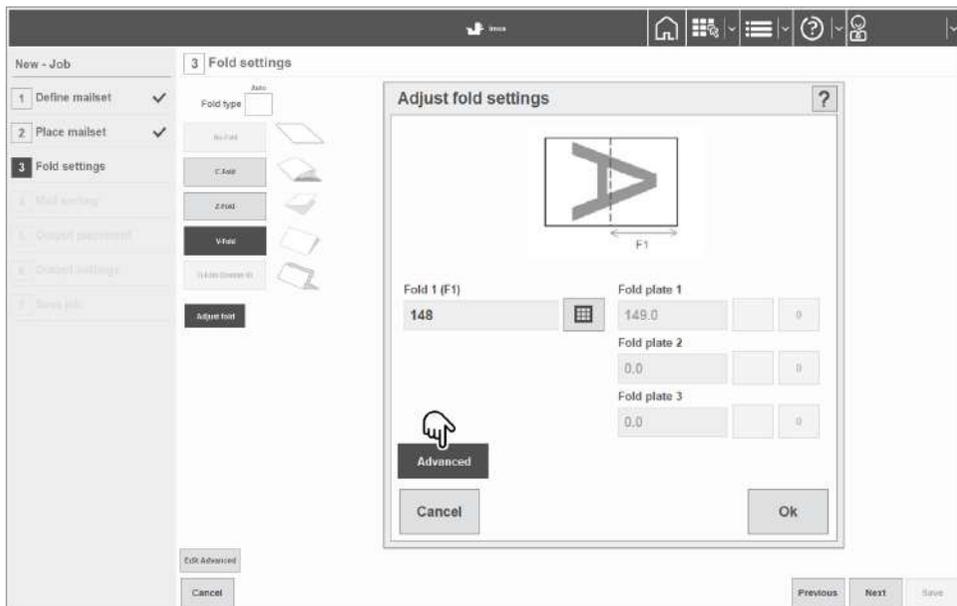
QTL-RND-SCR-00000077-A-00

Figure 4.16 – Adjust fold settings

Note:

Custom-Fold must be enabled in System Options in the Service screen to adjust the fold plate lengths.

> See section **8.4.1 Feeder Folder Paper and Fold Details** for further assistance.

> See section **8.5.1 Tower Folder Paper and Fold Details** for further assistance.

> See section **5.1.4.8 Reading Orientations** for further assistance.

4. Press '**Ok**' once the desired settings have been made.

> Do not reselect the '**Auto**' fold type option once the change has been successfully made.

4.4.1   Advanced Fold Settings

1. Press '**Edit Advanced**' as shown in Figure 4.17 for advanced fold settings.

QTL-RND-SCR-00000078-A-00

Figure 4.17 – Accessing advanced fold settings

2. Edit the following advanced fold settings as required:

Collate Mode

Press '**Auto**' to select a collate mode from the list other than default setting '**Together**'.

- **Singly** - Folds sheets one by one.
- **Together** - Collates forms and folds them together when singly fed from different hoppers.
- **Together via Accumulator** - Collates forms and folds them together, but feeds into the accumulator before folding.

Maximum in Accumulator

- Up to 25 sheets depending upon the paper type.

Maximum Fold (Forms)

Number of forms that can be folded together. Groups bigger will split into the maximum number (max. 8 forms of 80gsm), followed by the remainder.

Multi-Envelope Mode

Allows two separate jobs to run in succession using the same document set.

- **Split Oversized** - Splits, folds and inserts as '**Maximum Fold**' described above.

    Note:

    Split packs are not available when feeding face-up, as the address page will not be in the window of the envelope.

- **Divert Oversized** - All groups more than number set in Divert/Split Threshold will be diverted.
- **Divert Undersized** - Same applies for groups below the threshold. Machine is then stopped, job is changed and forms in divert tray are replaced into the document set, and the new job is run.

Divert/Split Threshold

If '**Divert Oversized**' or '**Divert Undersized**' is selected, Divert/Split Threshold must be set to the same as Maximum Fold (Forms), see also Table 4.1 for further information.

Error Handling

Action of machine after bad reads with the following options available:

- **Divert and Continue**
- **Divert and Stop**
- **Stop in Accumulator**

Oversize/Undersize Handling

Action of machine after diverting with the following options available:

- **Divert and Continue**
- **Divert and Stop**
- **Stop in Accumulator**

    Note:

    Not available if Split Oversized is set.

The following Table 4.1 shows the handling of oversized/undersized groups under different circumstances.

Multi-Envelope Mode	Maximum Fold	Maximum in Accumulator	Divert/Split Threshold	Comment
Split Oversized	When folding, the group or sub-group is folded on reaching this limit	When not folding or diverting, the group/subgroup is ejected towards divert or head unit on reaching this limit	Not used	Mechanical limits of folder and accumulator for given stationery
Divert Oversized	Not used (As for Split Oversize if oversize not yet detected)	Not used (As for Split Oversize)	Complete group assembled in accumulator, then diverted if prime document count is equal or greater than this limit	Used for diverting large groups for re-processing into a larger envelope
Divert Undersized	Not used (As for Split Oversize if undersize not yet detected)	Not used (As for Split Oversize)	Complete group is assembled in accumulator, then diverted if prime document count is less than this limit	Used for diverting small groups for re-processing into a smaller envelope

Table 4.1 – Handling of folded forms

3. Press '**Next**' once the desired Fold settings have been made.

4.5   Mail Sorting

Mail sorting allows weight groups to be defined and added to a numbered Mailsort, which can then be directed to a particular exit. It applies only when one or more sorters are fitted, which may optionally also be fitted with 1 or 2 conveyors.

In addition to weight groups, an Exit Selection mark or character can be used to differentiate Mail Sorts.

Figure 4.18 shows the maximum configuration of 2 sorters and 3 output conveyors.
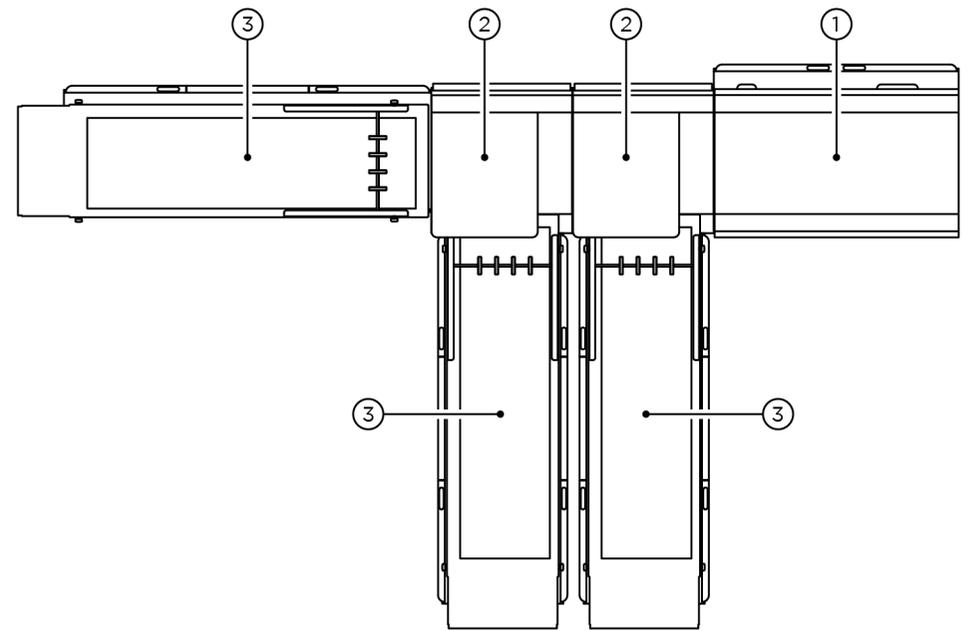
QTL-RND-GEN-00000190-A-00

Figure 4.18 – Mail sorting configuration

1. Inserter

2. Sorter

3. Conveyor

4.5.1   Postal Product

A Postal Product is a complete filled envelope. Different postal products can be programmed to allow sorting for different needs.

1.   To use Mail sorting, select an existing mailsort from the '**Postal Products**' list.

2.   To create a new mailsort, press '**New**' in the Postal Products dialog box as shown in Figure 4.19.

QTL-RND-SCR-00000079-A-00
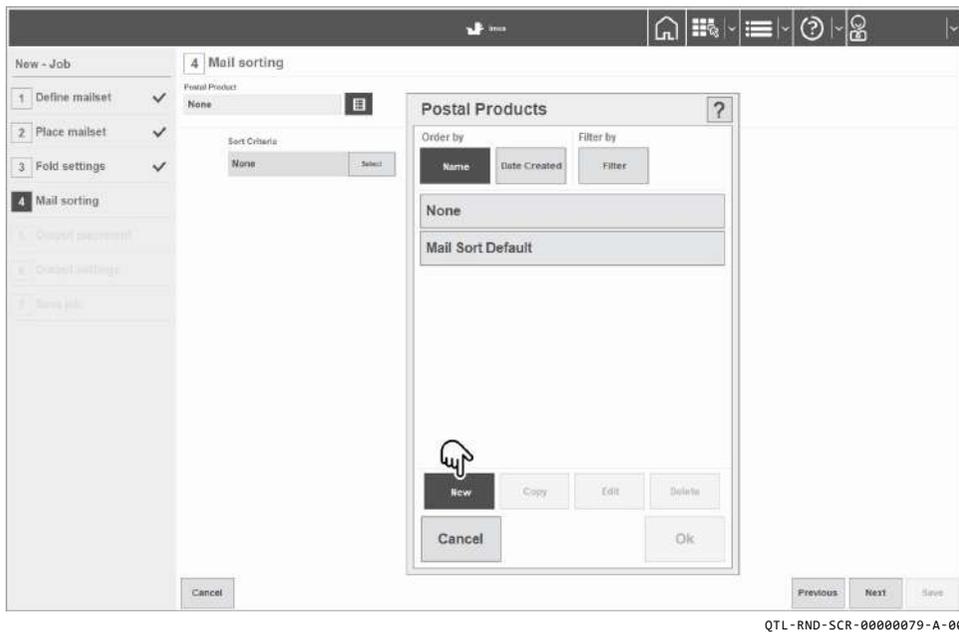
Figure 4.19 – Postal products

3.   Enter a name for the new Postal product.

4.   Set the weight groups and postage rate as required.

Note:

The minimum weight of each group is the same as the maximum weight of the previous group as shown in Figure 4.20.

QTL-RND-SCR-00000080-A-00

Figure 4.20 – New postal product

5.   Press '**Save**' once the desired settings have been made.

> **!** Users with appropriate access rights can also create Postal Products (following the same procedures), from the Libraries within the Menu Screen.

4.5.2   Mail Sort Settings

A Mail sort is part of the Postal Product and is used to determine how the mail-pieces within it are treated when they reach the sorter, by using the following sort criteria as shown in Figure 4.21.

QTL-RND-SCR-00000180-A-00

Figure 4.21 – Sort criteria

Mail-pieces with Weight Group criteria use a priority basis to determine the exit sorter.

1.   Select the '**Sort Criteria**', and then the required '**Mail sort**' associated with it.

2.   Set the Mail sort priority required for each line as shown in Figure 4.22.

QTL-RND-SCR-00000081-A-00

Figure 4.22 – Mail sorting settings

Note:

The last Mail sort selected will be used by default when selecting the sort criteria and the required mail sort associated with it.

Each Mail sort can have a number of combinations of criteria, some of which may overlap, you can determine which has priority.

Figure 4.22 shows Weight Group 2 and Weight Group 3 both using Mail sort 2. It is possible to change the priority so that mail-pieces with Weight Group 3 have priority over those in Weight Group 2 instead of the existing priority.

3.   To change the priority, select a '**priority number**' to switch on the scroll arrows as shown in Figure 4.23.
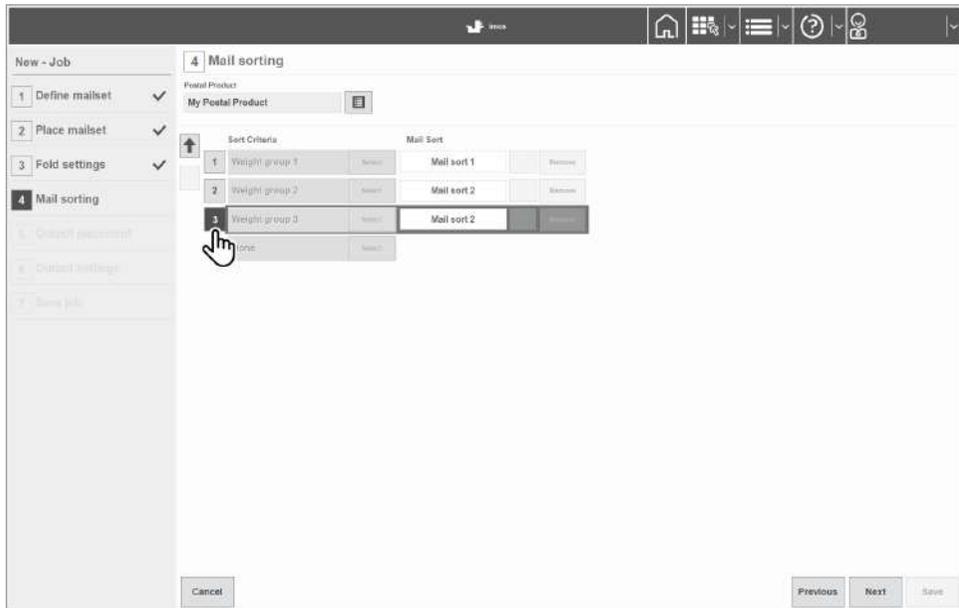
QTL-RND-SCR-00000082-A-00

Figure 4.23 – Changing the mail sort priority

4.   Use the arrow to adjust the sort priority, then select the number again to finalise the sort priority.

5.   Press '**Next**' once the desired Mail Sort settings have been made.

4.6   Output Placement

Output placement settings allow the operator to select a different exit instead of the default (if other exits are fitted).

An exit may be an Output Conveyor, or Catch bin.

1.   To change the output placement, select any exit or mail sort, as shown in Figure 4.24, then select the required exit or mail sort to change it.

QTL-RND-SCR-00000083-A-00

Figure 4.24 – Output placement

2.   To revert back to the default settings, press '**Auto place mail sorts**'.

3.   Press '**Next**' once the desired settings have been made.

4.7   Output Settings

Output settings control how certain outputs are used, whether by an Output Conveyor, Turner, Franker, Printer, or a combination of these depending on the units installed and configured within IMOS hardware units setup.

1. First select the output exit (e.g. Exit 1, Exit 2, or Exit 3) to be used for the output setting, set batching to '**Batch On**' and then press '**Ok**' as shown in Figure 4.25.
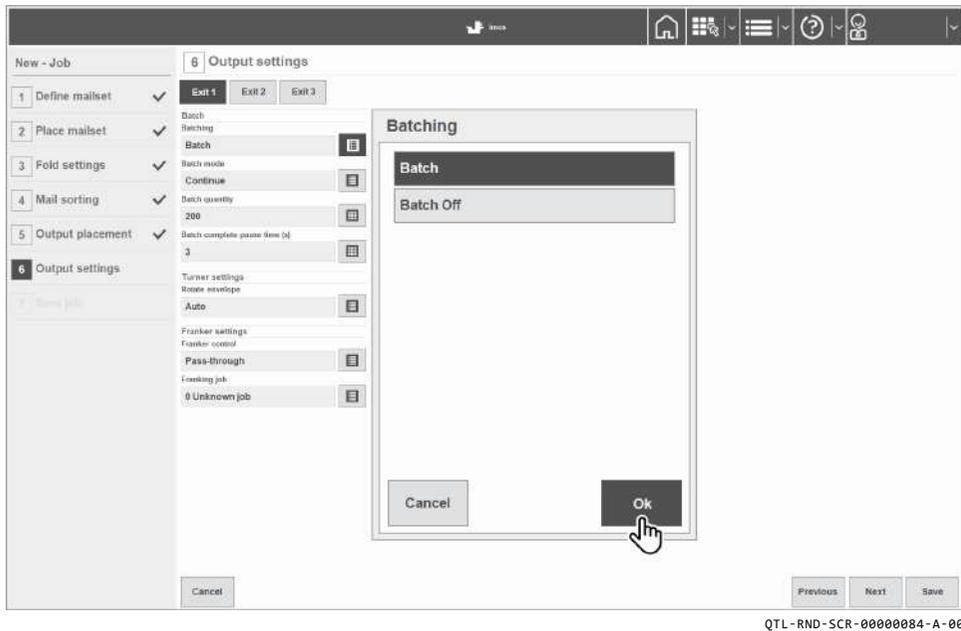
Figure 4.25 – Output batch settings

The Batch mode must also be set with the following options available:

- **Stop** - When batch quantity is reached, the machine will stop until the '**Run**' button is pressed to run another batch

- **Continue** - When batch quantity is reached, the machine will pause for the specified '**Batch complete pause time**', then resume running

Note:

The Conveyor will continue to run.

2. To set the Batch mode, select the required mode from the list of options and then press '**Ok**' as shown in Figure 4.26.

Figure 4.26 – Batch mode settings

3. Set the required '**Batch quantity**' number.

4. Finally, if '**Continue**' batch mode is selected, set the required '**Batch complete pause time**' that the machine will pause for.

4.7.1   Turner Output Settings

The following rotate envelope settings are available when an Turner is fitted with a Franking machine:

- **Auto**
- **Yes**
- **No**

Select the required '**Rotate envelope**' setting from the list of options and then press '**Ok**' as shown in Figure 4.27.

QTL-RND-SCR-00000086-A-00
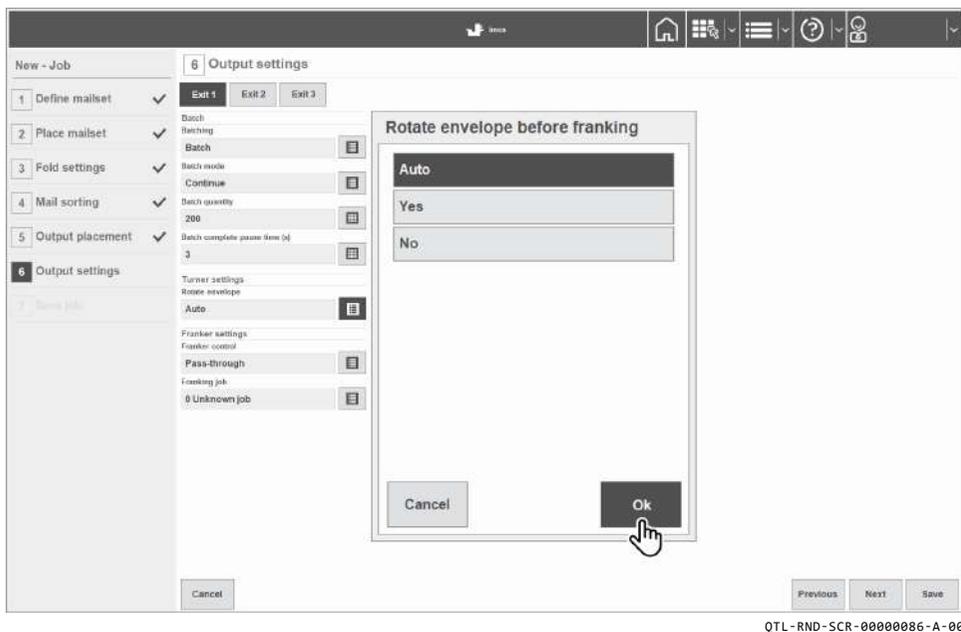
Figure 4.27 – Turner output settings

Note:

If '**Auto**' is selected, and the height of the envelope is programmed below 140mm, it forces the envelope to '**No**' rotate before franking.

4.7.2   Franker Output Settings

The following Franking control settings are available when a Franking machine is fitted:

- **Dumb** - Franks every mail-piece that passes. No feedback between the Inserter and Franking machine. Neither will stop if an error occurs.
- **Franking machine** - Franks mail-pieces determined by the Franking machine software. Allows feedback between the Inserter and Franking machine. Either machine will stop if an error occurs on either machine.
- **Pass-through** - Allows every mail-piece to pass un-franked

1. Select the required '**Franker control**' setting from the list of options and then press '**Ok**' as shown in Figure 4.28.

QTL-RND-SCR-00000087-A-00
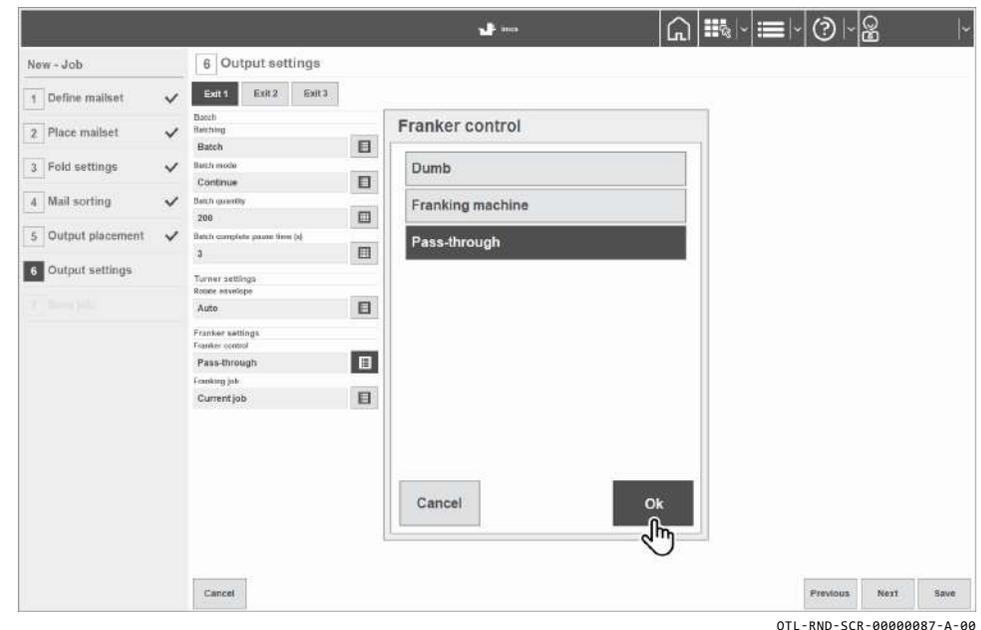
Figure 4.28 – Franker output settings

2. Finally select the '**Franking job**' from the list (e.g. Current job).

4.7.3   Output Conveyor Settings

The following Output Conveyor settings are available:

- **Single jog adjust** - Sets the gap between each mail-piece on the conveyor (effectively the '**speed**' of the conveyor).

- **Batch complete jog step** - Sets the gap between each completed batch

- **Mark reading jog step** - Sets the gap after a force jog barcode character or OMR mark is read.

See section **8.9 Reading Specifications** for further details.

- **Autoend jog step** - Sets the amount the conveyor is advanced after the '**Autoend**' button is pressed.

Select the Output Conveyor settings as required for unsorted mail or sorted mail (if using a mailsort), as shown in Figure 4.29.

QTL-RND-SCR-00000088-A-00
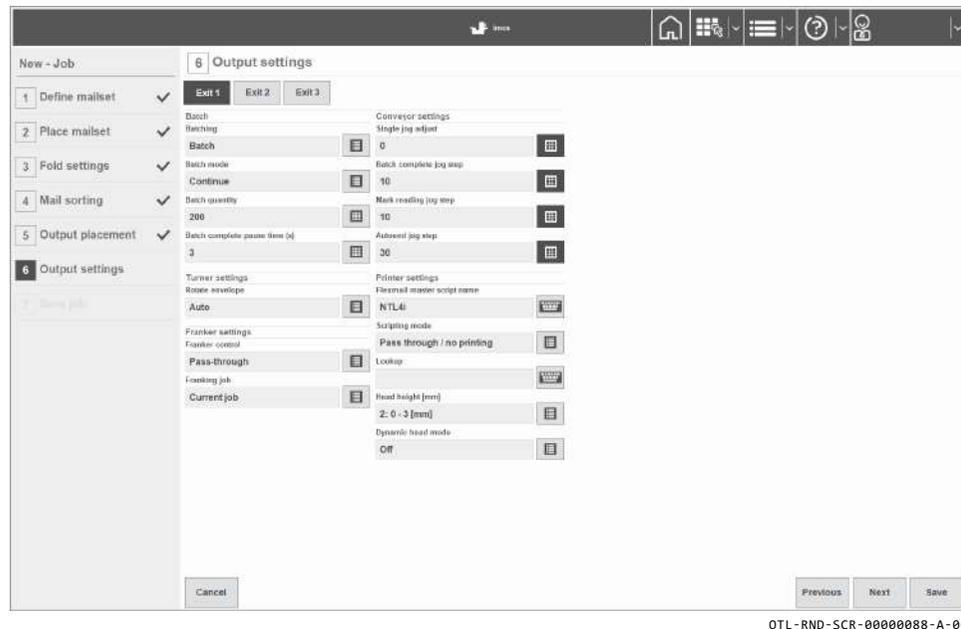
Figure 4.29 – Output Conveyor settings

4.7.4   Printer Output Settings

1. If a Printer is fitted, first enter the '**Flexmail master script name**' being used, via the on-screen keypad, then press '**Ok**' as shown in Figure 4.30.

QTL-RND-SCR-00000089-A-00
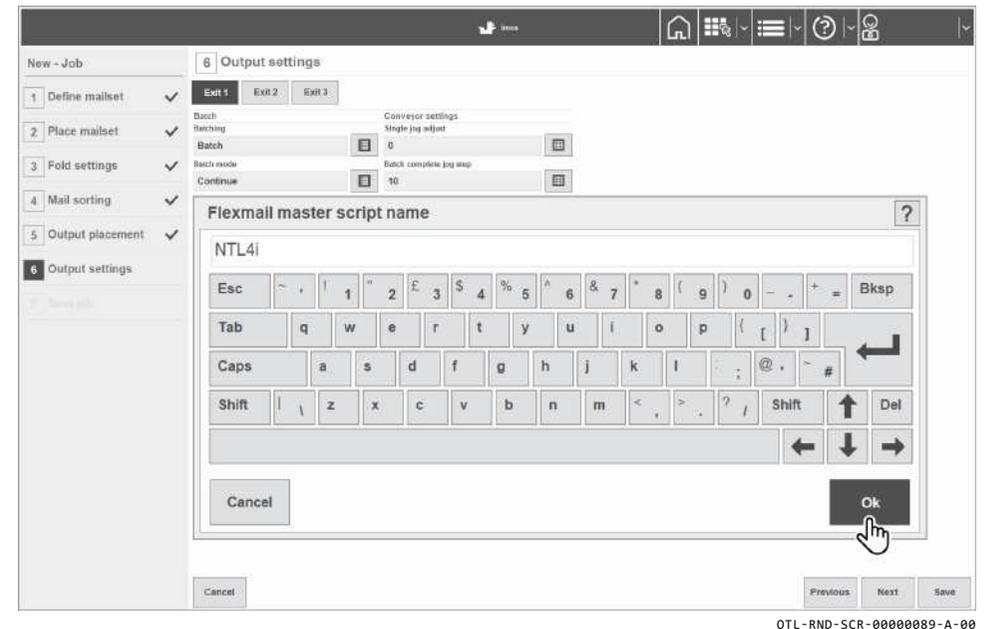
Figure 4.30 – Entering the Flexmail master script name

The following Printer Scripting modes are available:

- **Pass through/no printing** - Mail-pieces continue unprinted to the Franker or Conveyor.

- **Mailshot/sequential** - Mail-pieces will be printed with data supplied by Flexmail database in a sequential order from top to bottom.

- **Matching/DB lookup** - Mail-pieces will be printed with data read from the column in the Flexmail database named under the '**Lookup**' option in the Edit Printer Settings dialog box.

Note:

The name entered must be the same as the column in the Flexmail database.

- **Mailshot/sequential (non-reset)** - Setting is the same as '**Mailshot sequential**' but if the machine is Autoended, then switched back on, it will continue where it left off in the database. Without non-reset, the machine will restart at the first entry.

- **Matching/Dynamic DB lookup** - Setting is the same as '**Matching/DB lookup**' except the database is not located locally on the Flexmail PC, but accessed remotely via AIMS.

- **Mailshot/Dynamic Sequential** - Setting is similar to '**Matching/Dynamic DB lookup**' with the exception that it does not match a Piece ID in AIMS to a Piece ID read at the input of the machine. Any addresses that are assigned to Mail-pieces and then removed from the machine, get re-assigned to the next available mail-piece.

2. Select the required '**Scripting mode**', then press '**Ok**' as shown in Figure 4.31.

QTL-RND-SCR-00000090-A-00
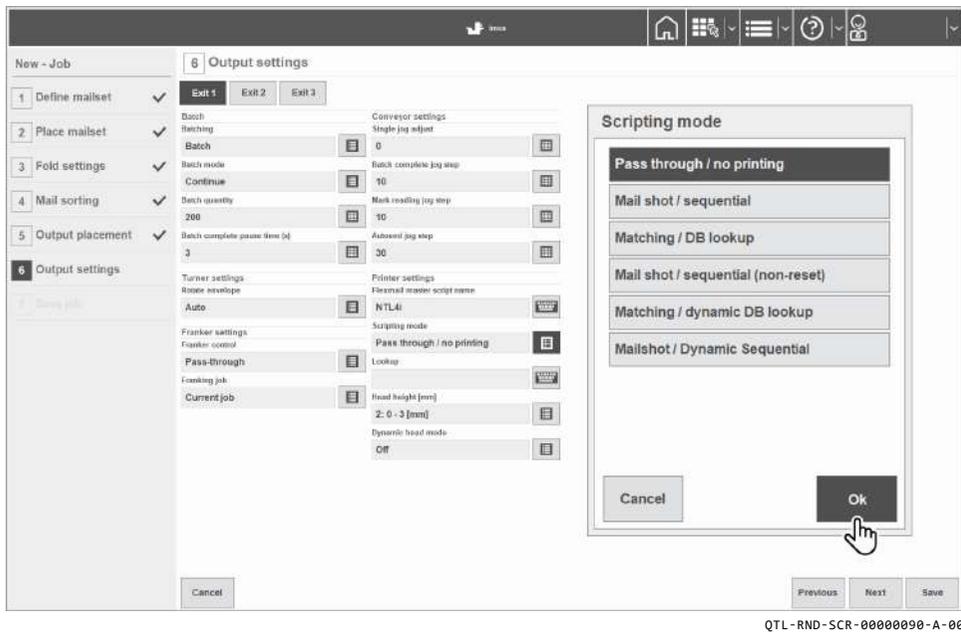
Figure 4.31 – Scripting mode settings

3. Using the on-screen keypad, enter the lookup column name in the '**Lookup**' option, The lookup column name must be the same name of the column in the Flexmail database, and must not contain any spaces. This is defined by the characters selected in the barcode.

4. Select the '**Head height**' to be used for the size of the pack, then press '**Ok**' as shown in Figure 4.32.

QTL-RND-SCR-00000091-A-00
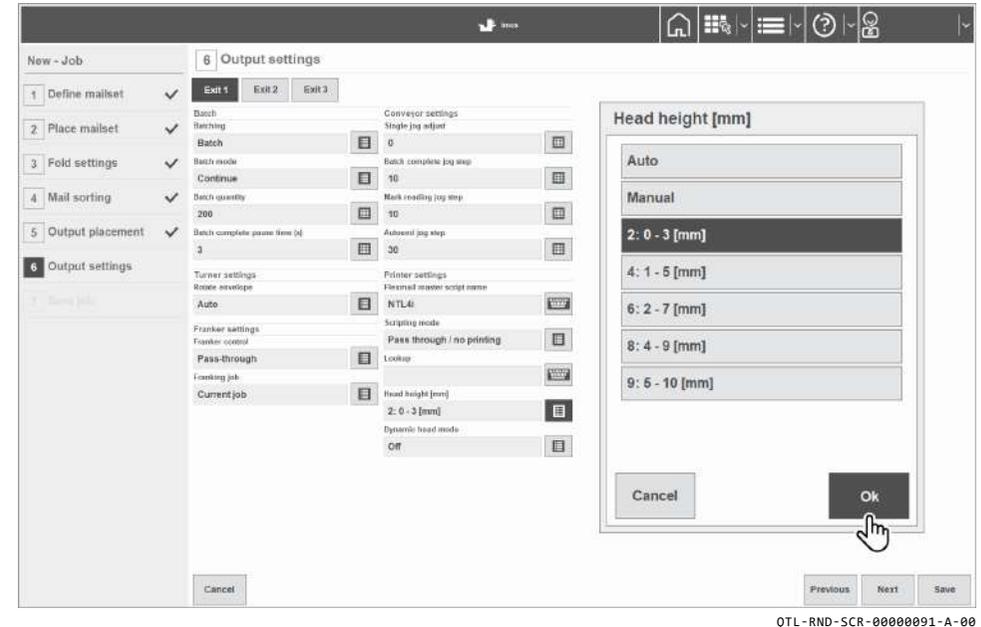
Figure 4.32 – Head height settings

5. Finally, select the '**Dynamic head mode**' to either '**On**' or '**Off**'.

Note:

If '**On**' is selected, IMOS calculates the thickness of the Mailset based on data entered when creating the envelope and document. If the thickness is greater than the programmed head height the system stops to allow the Head to be adjusted.

6. Press '**Next**' once the desired settings have been made.

4.8   Saving the Job

1. Enter a '**Job name**' and '**Job description**' using the on-screen keypad as shown in Figure 4.33.

QTL-RND-SCR-00000092-A-00
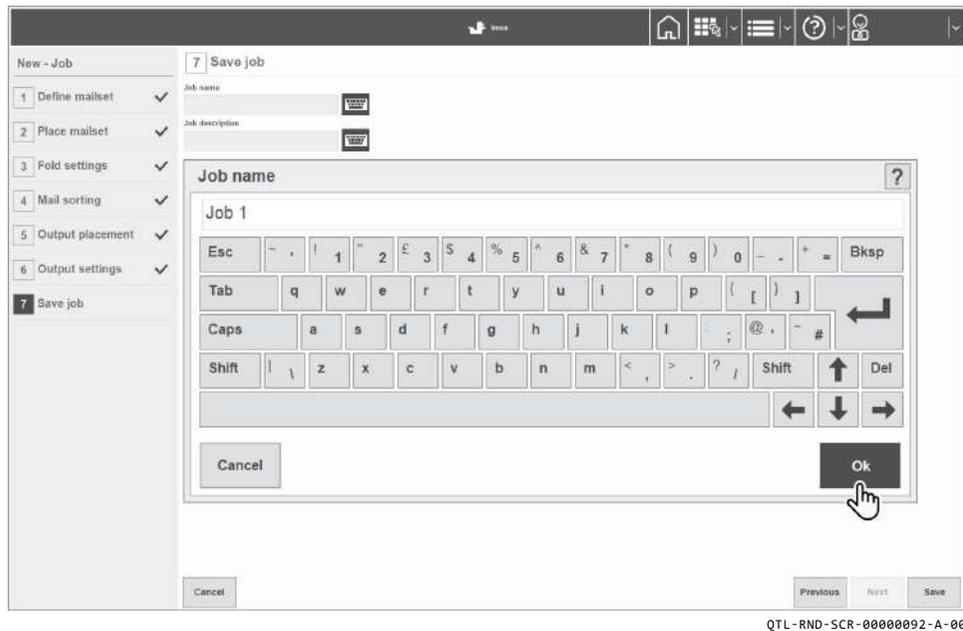
Figure 4.33 – Entering a job name

2. Select the '**Job number control mode**' from the following list of options if AIMS is being used:

- **Not used**
- **Auto generated**
- **Manual entry (external checking)**
- **Manual entry (internal only)** - Not used for AIMS jobs.
- **Multi-job (continuous)**
- **Read from prime** - This mode allows the job number to be read from the first page being processed on the prime document channel. The prime document channel is halted until inserter/IMOS has confirmed with AIMS that it is a valid job and then continues processing.

Note:

When using the '**Read from prime**' mode, the software uses the job number read for statistics and data logging.

3. Enter a '**Job number**' only if '**Manual entry**' is selected as the '**Job number control mode**'. Otherwise '**Job number**' is disabled for all other modes.

4. If required, select the '**AIMS mode**' the AIMS server uses from the following list of options:

- **Off**
- **Statistics** - This mode only enables machine performance information to be displayed in the AIMS software and reports are generated.
- **Audit** - In this mode Mail-piece-specific data in the barcode label (i.e. account number) is read by IMOS. Following processing by the inserter AIMS produces a database listing each Mail-piece showing successful processing or otherwise.

    This mode enables us to produce a reprint listing as we know which mail-pieces have failed based on the Mail-piece data.

- **Verification** - This mode allows the Job number and Mail-piece-specific data to be read by IMOS. AIMS imports a customer generated database listing all the mail-pieces in the job.

    Each mail-piece barcode is read at the input of the inserter, and the following checks are then carried out:

    A. Does the job exist within AIMS?
    B. Does the mail-piece exist within the database in AIMS?
    C. Has the mail-piece been read already (i.e. is it a duplicate mail-piece)?

    If the job number and mail-piece are valid then the inserter will continue to process the document (mail-piece).

    Following successful processing, IMOS will report back to AIMS and AIMS will then update the database showing the outcome result for each mail-piece.

    All the information to control the inserter contained within the barcode label (2D, BCR, OCR).

    This mode enables us to produce a reprint listing as we know which Mail-pieces have failed.

- **Lookup** - In this mode Job number and Mail-piece-specific data is read by IMOS. Additionally, AIMS imports a customer generated database listing all the mail-pieces in the job.

  Each mail-piece barcode is read at the input of the inserter the following checks are carried out:

  A.   Does the job exist within AIMS?

  B.   Does the mail-piece exist within the database in AIMS?

  C.   Has the mail-piece being read already i.e. is it a duplicate mail-piece?

  If the job number and mail-piece are valid then the inserter will continue to process the document (mail-piece).

  Only the Job Number and mail-piece ID are contained within the label (2D, BCR, OCR) all inserter controls are contained within the database, which is communicated from AIMS to IMOS in real-time.

  This mode enables us to produce a reprint listing as we know which Mail-pieces have failed.

5.   If required, select the '**Data-logging mode**' from the following list of options:

- **Off**
- **AIMS Compatible**
- **Standard**

6.   Finally, press '**Save**' to complete defining the Job mailset.

!   Once a job has been created, it can be edited if needed by pressing the '**Edit**' button for the selected job in the Jobs screen.

5   Operator Instructions **5**

5.1   Setting up a Job

The following setup adjustments must first be made in order for the machine to run correctly to suit the material form size (stationery) being processed.

5.1.1   Loading the Envelope Hopper

1. Load the required envelopes needed for processing (flaps forward facing) into the envelope hopper as shown in Figure 5.1.
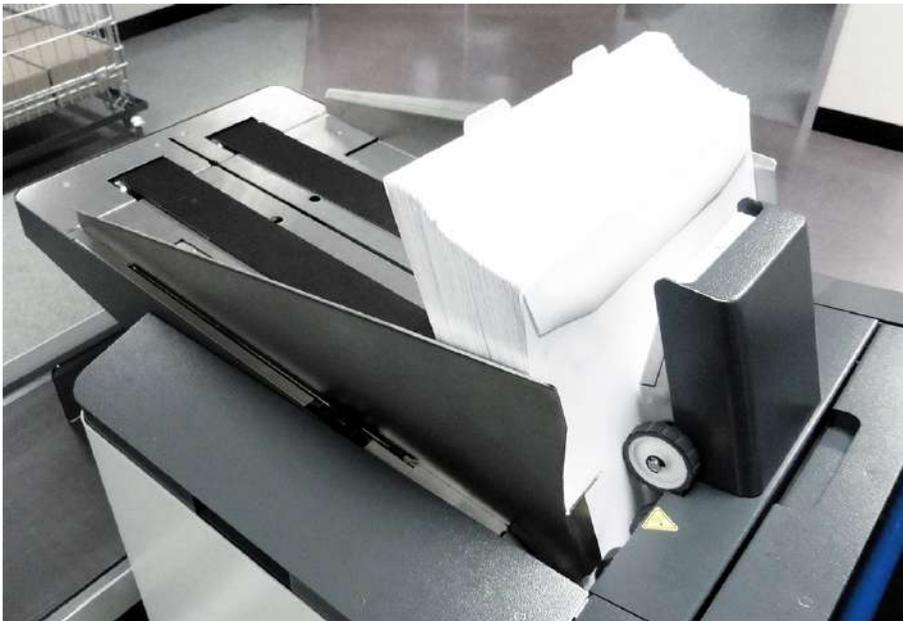
QTL-RND-OPS-00000109-A-00

Figure 5.1 – Loading the envelope hopper

2. The conveyor will automatically move the loaded envelopes forward.

Adjustments to the envelope hopper side guides may be needed to suit the envelope size being processed.

3. Use the adjustment wheel as shown in Figure 5.2, and adjust the side guides at the feed end of the conveyor to an approximate clearance of 1 - 2mm on each side of the envelope.

QTL-RND-OPS-00000110-A-00

Figure 5.2 – Adjusting the envelope hopper side guides

Note:

The guides move in unison when being adjusted, ensuring the envelopes being processed are fed through correctly and centred.

> ⚠ The side guides taper towards the output exit of the conveyor. Ensure the guides are adjusted at the feed end of the conveyor to ensure envelopes are fed through freely and unrestricted.

Adjustments to the conveyor backrest may also be needed to suit the envelope size being processed.

4. Adjust the position of the conveyor backrest by lifting the backrest adjustment handle upwards and then sliding the backrest along the conveyor into the required position (dependant on the stack size of envelopes) towards the hopper feed entry point as shown in Figure 5.3.
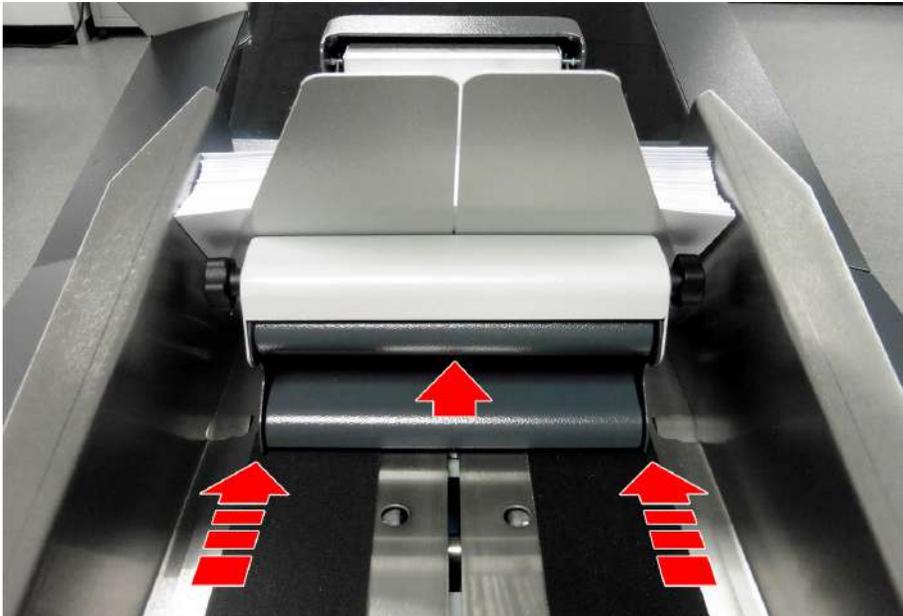
QTL-RND-OPS-00000111-A-00

Figure 5.3 – Adjusting the position of the conveyor backrest

5. Release the backrest adjustment handle to lock the conveyor backrest into position once the desired adjustment has been made.

Note:

Once feeding begins, the backstop should be left in its pulled back state and let the conveyor move the envelopes forward towards the pickup rollers.

6. Adjust the conveyor backrest angle to suit the following envelope sizes:
    ▪ **C4/C5** - Backrest angle should be fully raised for C4 and C5 sized envelopes
    ▪ **DL/DL+** - Backrest angle should be fully lowered for DL and DL+ sized envelopes

7. Loosen the thumb knobs on each side of the conveyor backrest as shown in Figure 5.4 and adjust accordingly.

QTL-RND-OPS-00000112-A-00

Figure 5.4 – Adjusting the conveyor backrest angle

8. Re-tighten the thumb screw knobs on both sides once the final adjustments have been made.

> ❗ If envelopes feed erratically, try adjusting the backrest angle in-between fully raised and lowered positions.

5.1.1.1 Envelope Separator Adjustment

The separator prevents more than one envelope being fed at a time.

1. First open the Insert Head side cover.

2. To adjust the separator, turn the blue knob located below the envelope conveyor as shown in Figure 5.5.
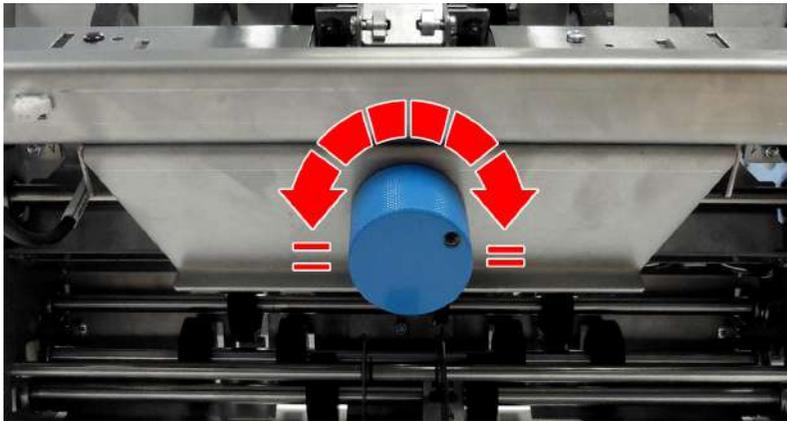
QTL-RND-OPS-00000113-A-00

Figure 5.5 – Adjusting the envelope separator

3. Slide a required envelope to be processed into the gap and turn the knob until the separator will just grip the envelope:

   ▪ **Clockwise** - Decreases the gap

   ▪ **Counterclockwise** - Increases the gap

> ⚠️ Take caution when setting the separator gap, envelope windows and documents may catch and damage the metal separator shield tapes when pulling them out of the hopper too aggressively.

4. Close the side cover once the desired adjustments have been made.

5.1.2 Loading the Versatile Feeder Hopper

1. To load the Versatile Feeder hopper, first insert a single document or enclosure into the hopper.

2. Loosen the backrest thumb screw knob, and then slide the backrest forwards or backwards to an approximate clearance of 2-3mm from the trailing edge of the document or enclosure as shown in Figure 5.6, to allow subsequent feeds to full into the hopper pocket correctly.
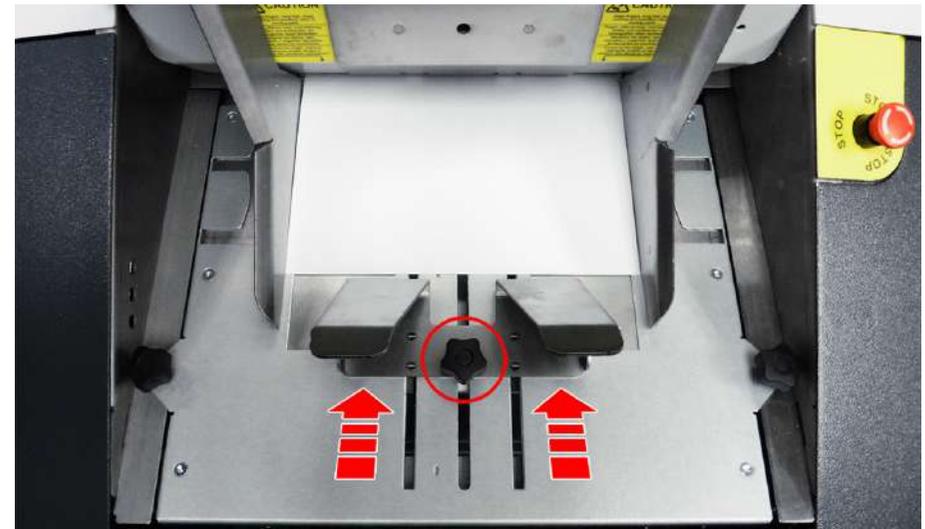
QTL-RND-OPS-00000114-A-00

Figure 5.6 – Adjusting the Versatile Feeder backrest

Note:

Adjustments to the Versatile Feeder hopper side guides and separator gap may be needed to suit the document or enclosure size being processed.

> 📄 See section 5.1.2.1 Versatile Feeder Separator Adjustment for further assistance.

3. Re-tighten the thumb screw knob once the desired adjustments have been made.

4. Load the remaining documents or enclosures required for processing into the hopper.

5. To adjust the side guides, loosen the thumb screw knob as shown in Figure 5.7 and adjust the side guides by moving them inwards or outwards to an approximate clearance of 1 - 2mm on each side of the document or enclosure.
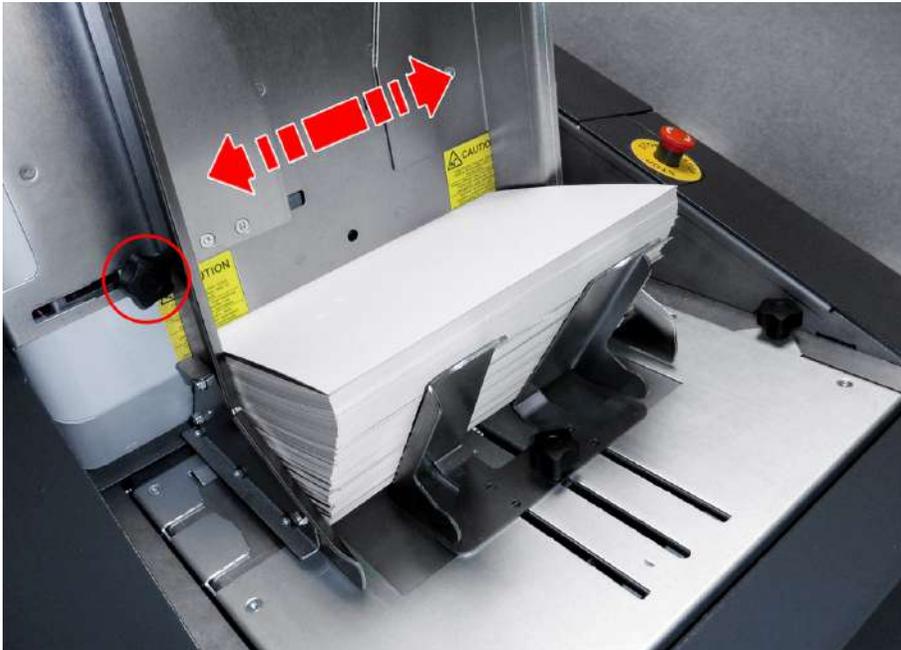
QTL-RND-OPS-00000115-A-00

Figure 5.7 – Adjusting the Versatile Feeder hopper side guides

Note:

The guides move in unison when being adjusted, ensuring the documents or enclosures being processed are fed through correctly and centred.

6. Re-tighten the thumb screw knob once the desired adjustments have been made.

5.1.2.1   Versatile Feeder Separator Adjustment

> **!** Take caution when setting the separator gap, envelope windows and documents may catch and damage the metal separator shield tapes when pulling them out of the hopper too aggressively.
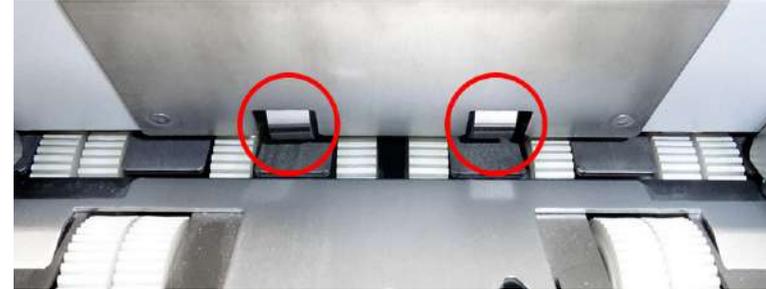
QTL-RND-OPS-00000268-A-00

Figure 5.8 – Separator shield tapes

1. First, gently slide a document into the hopper feed gap so it initially just grips the paper as shown in Figure 5.9.

QTL-RND-OPS-00000141-A-00

Figure 5.9 – Sliding a document into the hopper feed gap

2. Open the Versatile Feeder operator side cover, and turn the pickup roller feed wheel as shown in Figure 5.10 to feed the document further into the gap to help set the separator gap.
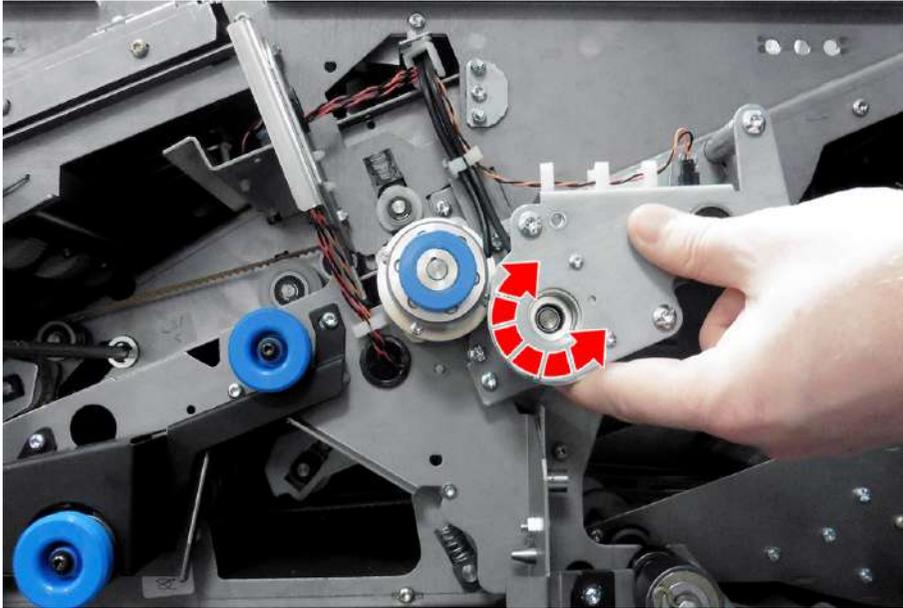
QTL-RND-OPS-00000116-A-00

Figure 5.10 – Turning the pickup roller feed wheel

3. Once the document has been fed further into the gap, the separator can now be adjusted.

4. The separator prevents more than one enclosure being fed at a time, and can be adjusted using the adjustment knob located behind the versatile feeder hopper as shown in Figure 5.11.

QTL-RND-OPS-00000117-A-00

Figure 5.11 – Separator adjustment knob

5. Use the setting gauge on the adjustment knob as a visual aid. Turn the adjustment knob until the separator will just grip the enclosure. clockwise decreases the gap, and anticlockwise increases it as indicated by the markers.

Note:

Ensure rollers are cleaned, or feed tyres replaced if problematic feeding occurs.

See section **6.1.3 Cleaning Rollers** for further assistance.

See section **6.3.2 Versatile Feeder Feed Tyres** for further assistance.

5.1.3   Loading the Feeder Folder Hopper

1. To load the Feeder Folder hopper, first loosen the thumb screw knob as shown in Figure 5.12.

QTL-RND-OPS-00000451-A-00

Figure 5.12 – Loosening the Feeder Folder hopper thumb screw knob

2. Insert a single form/document into the hopper, and adjust the side guides inwards or outwards to give an approximate clearance of 1 - 2mm on each side of the form.

3. Re-tighten the thumb screw knob once the desired adjustment has been made, and remove the document.

4. Press down on the hopper tray and load a fanned stack of forms/documents as shown in Figure 5.13.

QTL-RND-OPS-00000452-A-00

Figure 5.13 – Loading the Feeder Folder hopper

5. Ensure that the leading edges are firmly contacting the chassis bridge at the lower end of the tray as shown in Figure 5.14.
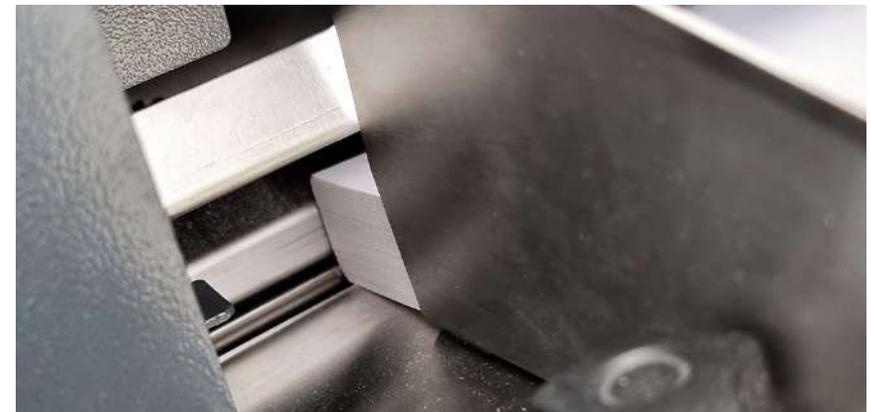
QTL-RND-OPS-00000453-A-00

Figure 5.14 – Document leading edges contacting chassis bridge

5.1.3.1   Feeder Folder Separator Adjustment

The separator prevents more than one document being fed at a time. The adjustment wheel is located on the operator side of the Feeder Folder.

1.   Raise the Feeder Folder top cover so that the grey separator roller is visible as shown in Figure 5.15.

QTL-RND-OPS-00000455-A-00

Figure 5.15 – Raising the Feeder Folder top cover showing the grey separator roller

2.   To access the separator adjustment wheels, open the Feeder Folder operator side cover as shown in Figure 5.16.
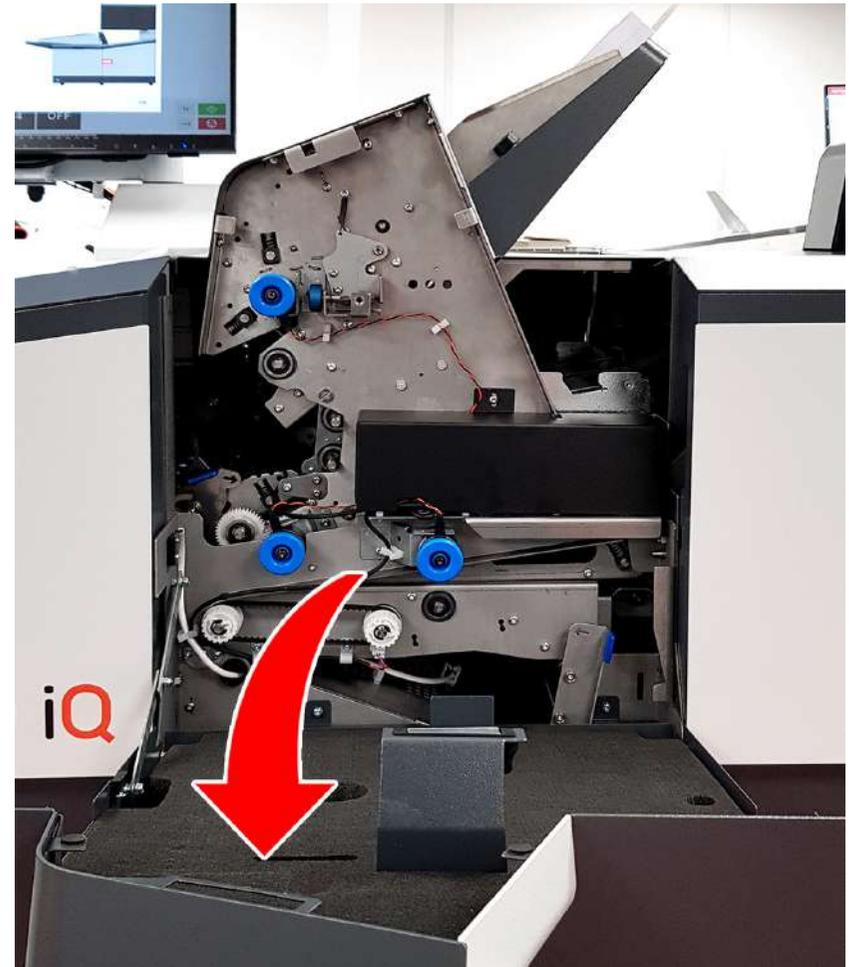
QTL-RND-OPS-00000450-A-00

Figure 5.16 – Opening the Feeder Folder operator side cover

3.   Initial settings for standard documents is for the separator roller to just be touching the pad below it. Turn the roller in the direction of feed to gauge this.

4. To increase the separator gap, turn the adjustment wheel downwards (clockwise), or to decrease the gap turn the wheel upwards (anti-clockwise) as indicated by the markers in Figure 5.17.
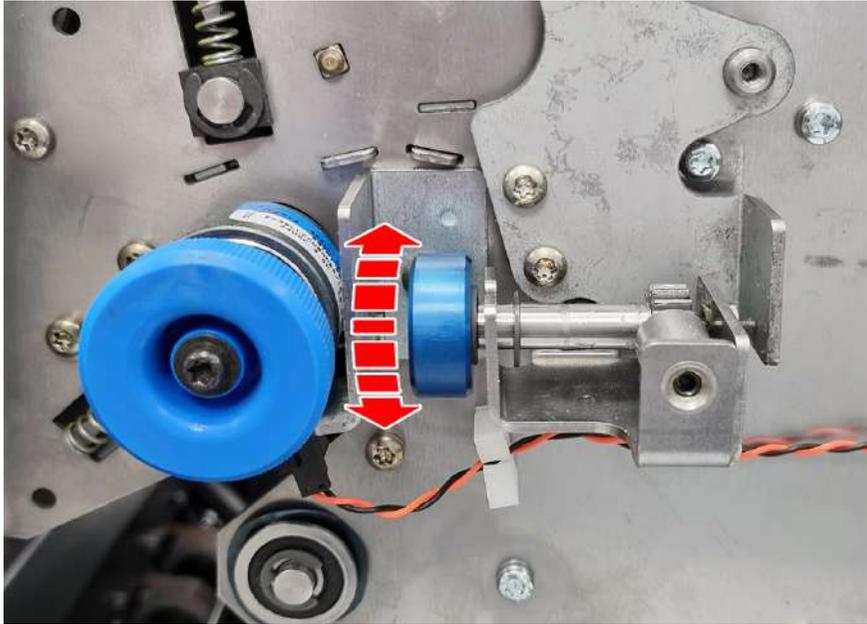
QTL-RND-OPS-00000456-A-00

Figure 5.17 – Adjusting the Feeder Folder separator gap

5. Close the Feeder Folder operator side cover and top cover once the desired adjustments have been made.

5.1.3.2   Curled Forms Stop Adjustment

Documents that are slightly curled may become problematic and not feed properly, as the leading edge may become snagged at the infeed.

To help overcome this (in most cases) or minimize paper/forms from curling when feeding through the hopper, the hopper tray is fitted with a 2-position stop that can be raised or lowered.

1. First remove the hopper tray by lifting it up and outwards as shown in Figure 5.18.

QTL-RND-OPS-00000454-A-00

Figure 5.18 – Removing the Feeder Folder hopper tray

2. The thumb knobs for adjusting the guide are located on the left and right (inside feed end) of the infeed tray as shown in Figure 5.19.

QTL-RND-OPS-00000127-A-00

Figure 5.19 – Adjusting the curled paper stop

3. Adjust the thumb knobs upwards or downwards using the marker indicated in Figure 5.20 as a visual aid to help achieve the required setting.
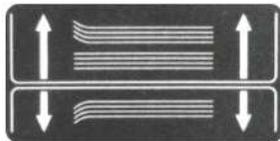
QTL-RND-OPS-00000128-A-00

Figure 5.20 – Curled paper guide adjustment marker

A. Select the upper (defalut) position for flat forms or forms curling upwards.

B. Select the lower position for forms curling downwards.

4. Ensure both knobs are properly located before replacing the infeed tray.

5.1.4   Loading the Tower Folder Infeed Tray

The Tower Folder is fitted with pods of one 1000-Sheet, or two 500-Sheet trays.

Paper orientation in the hoppers will depend upon the job requirement.

> For further assistance in the various appliactions see section 5.1.4.8 Reading Orientations and 5.1.4.9 Non-Reading Orientations.

5.1.4.1   500-Sheet Hoppers

1. To load the 500-Sheet tray, first loosen the thumb screw knob as shown in Figure 5.21.

QTL-RND-OPS-00000119-A-00

Figure 5.21 – Loosening the 500-Sheet tray thumb screw knob

2.   Insert a single form/document into the tray, and adjust the side guides inwards or outwards to give an approximate clearance of 1 - 2mm on each side of the form.

Note:

The guides move in unison when being adjusted, ensuring the paper/forms being processed are fed through correctly and centred.

3.   Re-tighten the thumb screw knob once the desired adjustment has been made, and remove the document.

4.   Press down on the tray and load a fanned stack of forms/documents under the pick-up rollers as shown in Figure 5.22.
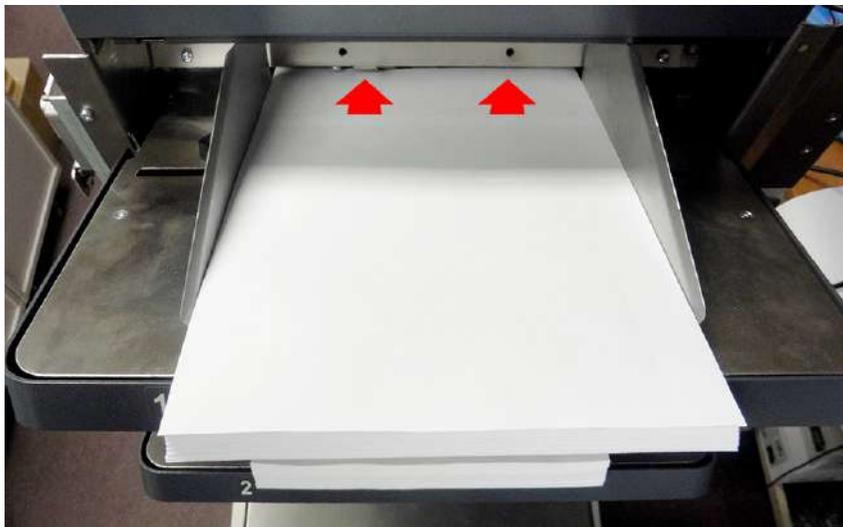
QTL-RND-OPS-00000120-A-00

Figure 5.22 – Loading the 500-Sheet tray

5.   Ensure that the leading edges are firmly contacting the chassis bridge at the lower end of the tray as shown in Figure 5.23.

QTL-RND-OPS-00000453-A-00

Figure 5.23 – Document leading edges contacting chassis bridge

5.1.4.2   1000-Sheet Hoppers

1.   Loosen the thumb screw knob and use the tabs to adjust the infeed tray guides by moving them inwards or outwards as shown in Figure 5.24 to an approximate clearance of 1 - 2mm on each side of the paper.
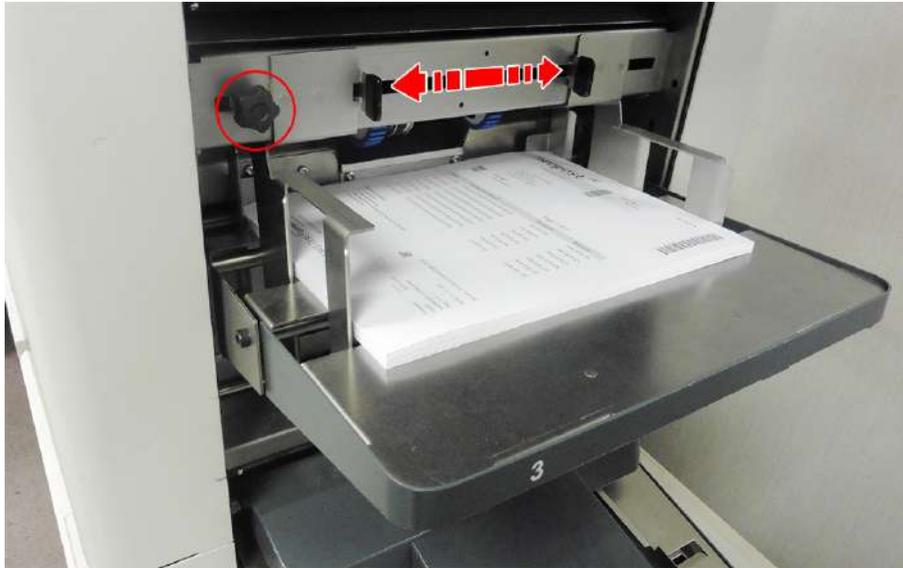
QTL-RND-OPS-00000121-A-00

Figure 5.24 – Adjusting the 1000-Sheet tray guides

Note:

The guides move in unison when being adjusted, ensuring the paper/forms being processed are fed through correctly and centred.

2.   Push the tray firmly downwards all the way and load the 1000-Sheet tray, ensuring the stack of paper/forms are loaded fully forward as shown in Figure 5.25.
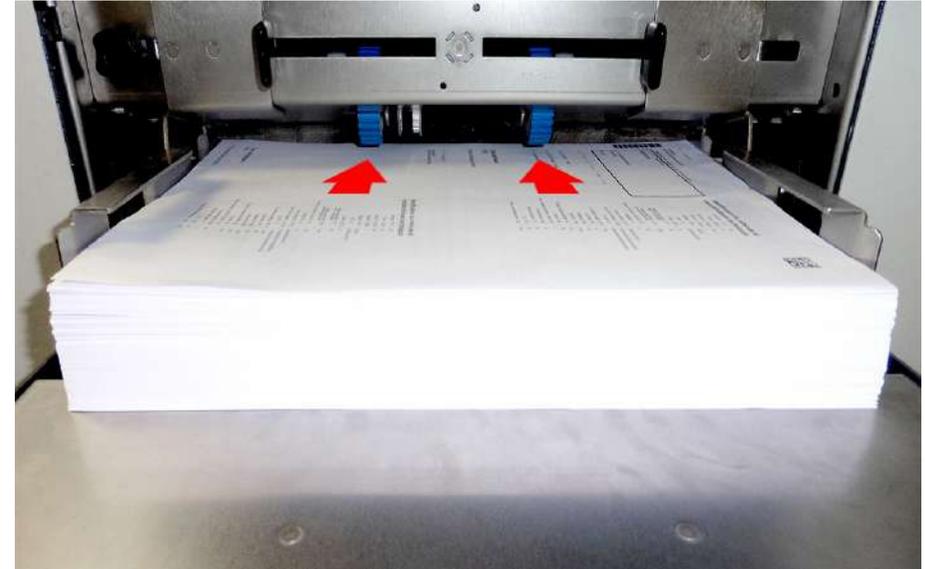
QTL-RND-OPS-00000122-A-00

Figure 5.25 – Loading the 1000-Sheet tray

3.   Re-tighten the thumb screw knob once the desired adjustments have been made.

5.1.4.3   Tower Folder Separator Adjustment

The separator prevents more than one paper/form being fed at a time. The adjustment wheels for both the 500-Sheet and 1000-Sheet hoppers are located on the operator side of the Tower Folder.

1.   To access the separator adjustment wheels, first open the Tower Folder operator side cover as shown in Figure 5.26.
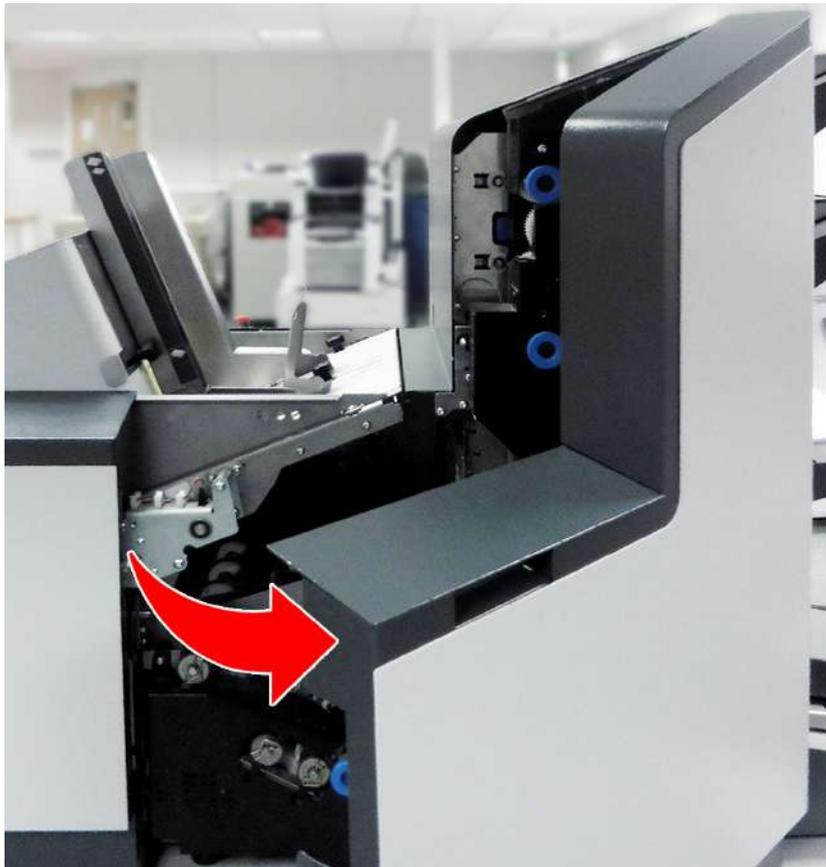
QTL-RND-OPS-00000125-A-00

Figure 5.26 – Opening the Tower Folder operator side cover

2.   Turn the adjustment wheels to open or close the gap, use the markers indicated in Figure 5.27 as a visual aid to help achieve the required setting.

QTL-RND-OPS-00000469-A-00

Figure 5.27 – Adjusting the Tower Folder separator gap

Note:

The separator adjustment wheels for both the 500-Sheet and 1000-Sheet hoppers are identical, however the adjustment wheel for the 1000-Sheet tray is oriented vertically.

3.   Adjust the separator gap according to the following:

- **Single Sheets** (up to 100gsm) - The separator roller should just contact the pad below. Increase the gap slightly if sheets feed erratically.

- **Thicker Forms** - Slide a form into the gap and adjust the wheel until the separator just grips it.

4.   Close the Tower Folder operator side cover once the desired adjustments have been made.

5.1.4.4 Curled Paper Guide Adjustment

500-Sheet hoppers have curled paper guides to help eliminate (in most cases) or minimize paper/forms from curling when feeding through the tray.

Note:

Multiple 500-Sheet hoppers will need to be removed beginning with the lowermost tray on the tower (i.e. tray 4 show in Figure 5.28) before preceding hoppers can be removed.

QTL-RND-OPS-00000470-A-00

Figure 5.28 – Tower Folder four 500-Sheet trays

1. Remove the tray by gently lifting the tray up and outwards as shown in Figure 5.29.

QTL-RND-OPS-00000471-A-00

Figure 5.29 – Removing a 500-Sheet tray

2. The thumb knobs for adjusting the guide are located on the left and right (inside feed end) of the tray tray as shown in Figure 5.30.

QTL-RND-OPS-00000127-A-00

Figure 5.30 – Adjusting the curled paper guide

3. Adjust the thumb knobs upwards or downwards using the marker indicated in Figure 5.31 as a visual aid to help achieve the required setting.
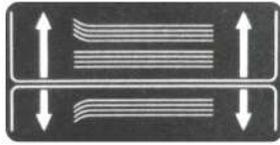
QTL-RND-OPS-00000128-A-00

Figure 5.31 – Curled paper guide adjustment marker

5.1.4.5   Accumulator Side Guide Adjustment

If an Accumulator is fitted to the Tower Folder, the side guides will need to be adjusted according to the paper/forms size being processed.

1. Loosen the thumb screw knob and adjust the accumulator guides by moving them inwards or outwards.

2. Use the pre-set size markings as shown in Figure 5.32 to determine the correct size and orientation of the forms to be collated together before folding as a group.
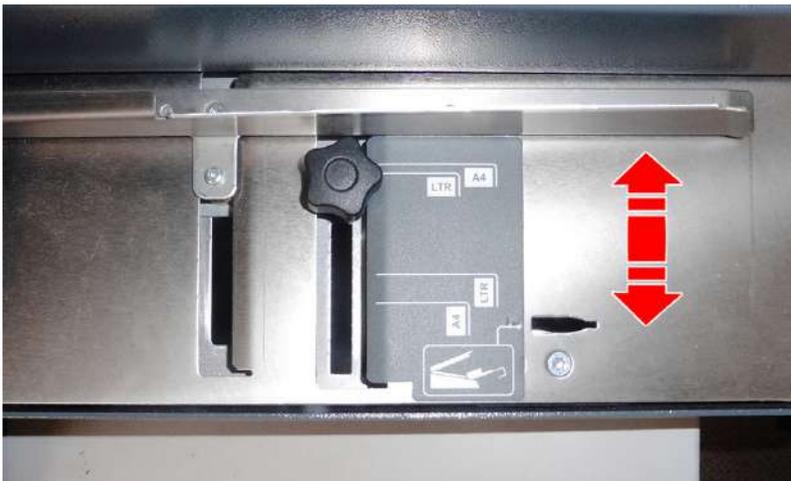
QTL-RND-OPS-00000123-A-00

Figure 5.32 – Adjusting the Accumulator side guides

Note:

The left side guide should just cover the indicator pre-set size markings.

The guides move in unison when being adjusted, ensuring the paper/forms being processed are fed through correctly and centred.

3. Re-tighten the thumb screw knob once the desired adjustment has been made.

4. To empty any paper/forms in the accumulator, raise the overguide until it locks up into place as shown in Figure 5.33.

QTL-RND-OPS-00000124-A-00

Figure 5.33 – Raising the Accumulator overguide

5. Once complete, press the lock latch inwards to release the overguide and return it into position.

5.1.4.6   Divert Tray Fitment

The divert tray allows for hand feed daily mail to be processed, and can be fitted to the accumulator to suit the required hand feed mode.

- Auto feed mode
- Manual feed mode

1. Raise the accumulator overguide to lock it into place, then adjust the accumulator side guides to suit the required stationery needed.

> See section 5.1.4.5 Accumulator Side Guide Adjustment for further assistance.

2. Attach the divert tray to the accumulator for the appropriate feed mode.

    A. **Auto feed mode**

    For Auto feed mode, fit the divert tray into the top surface slots of the accumulator as shown in Figure 5.34.

    Note:

    The divert tray side guides move independently of each other and should be made as narrow as possible before fitting the divert tray for Auto feed mode.

QTL-RND-OPS-00000466-A-00

Figure 5.34 – Divert tray attached for Auto feed mode

B. **Manual feed mode**

For Manual feed mode, fit the divert tray into the end slots of the accumulator as shown in Figure 5.35.

QTL-RND-OPS-00000467-A-00

Figure 5.35 – Divert tray attached for Manual feed mode

3. The divert tray side guides will need to be adjusted once the tray has been fitted.

> See section 5.1.4.7 Divert Tray Side Guide Adjustment for further assistance.

5.1.4.7 Divert Tray Side Guide Adjustment

Adjust the divert tray side guides for the appropriate feed mode to match the accumulator as shown in Figure 5.36 (Auto feed mode), and Figure 5.37 (Manual feed mode).
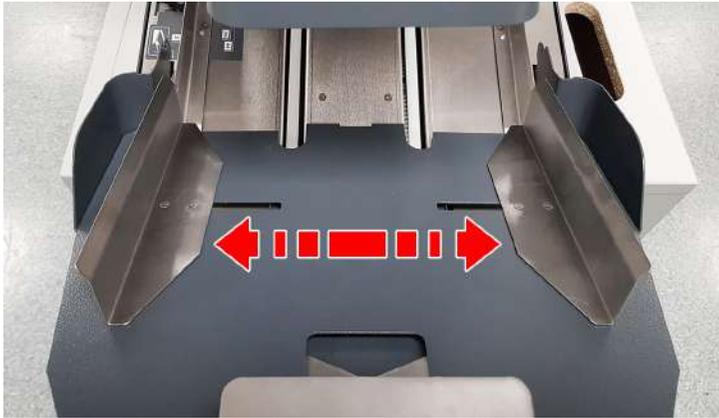
QTL-RND-OPS-00000472-A-00

Figure 5.36 – Adjusting divert tray side guides for Auto feed mode
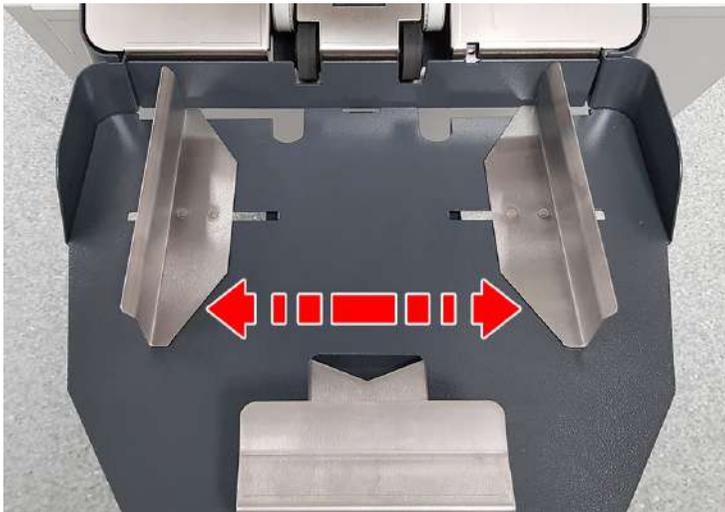
QTL-RND-OPS-00000472-A-00

Figure 5.37 – Adjusting divert tray side guides for Manual feed mode

5.1.4.8   Reading Orientations

UK and European (Reading) Document Sizes		Form Input Orientation at Hopper		Fold Panel Lenghts			Multi-group Document Collation	
Job Description	Fold Type	Face Down Head First	Face Up Feet First	Fold Plate 1	Fold Plate 2	Fold Plate 3		
A4 Form (297mm x 210mm) Document printed with **top address**	C-Fold	✓		78mm (121mm long envelope) 95mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)	✓	✓
A4 Form (297mm x 210mm) Document printed with **top address**	C-Fold		✓		219mm (121mm long envelope) 202mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)	✓	
A4 Form (297mm x 210mm) Document printed with **middle address**	C-Fold	✓		193mm (121mm long envelope) 199mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)		✓	✓
A4 Form (297mm x 210mm) Document printed with **top address**	Z-Fold	✓			78mm (121mm long envelope) 95mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)	✓	✓
A4 Form (297mm x 210mm) Document printed with **top address**	Z-Fold		✓	219mm (121mm long envelope) 202mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)	✓	
A4 Form (297mm x 210mm) Document printed with **bottom address**	Z-Fold	✓		104mm (121mm long envelope) 98mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)		✓	✓
A4 Form (297mm x 210mm) Document printed with **top address**	V-Fold	✓		149mm			✓	✓
A4 Form (297mm x 210mm) Document printed with **top address**	V-Fold		✓		149mm		✓	
European 16" form (406mm x 210mm) Document printed with **top address**	Double Fwd-Fold	✓		176mm (121mm long envelope) 198mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)	✓	✓
European 16" form (406mm x 210mm) Document printed with **top address**	Double Fwd-Fold		✓		230mm (121mm long envelope) 212mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)	✓	

② ①
FORMS FROM ACCUMULATOR
③

NOTE:
ALL DOCUMENTS PASS THROUGH THE ACCUMULATOR WHEN READING

QTL-RND-GEN-00000101-A-00

Figure 5.38 – UK and European Document Reading Orientations

US (Reading) Document Sizes		Form Input Orientation at Hopper		Fold Panel Lenghts			Multi-group Document Collation	
Job Description	Fold Type	Face Down Head First	Face Up Feet First	Fold Plate 1	Fold Plate 2	Fold Plate 3		
US Letter format (11" x 8½") Document printed with **top address**	C-Fold	✓		87mm (#10 Envelope)		99mm (#10 Envelope)	✓	✓
US Letter format (11" x 8½") Document printed with **top address**	C-Fold		✓		192mm (#10 Envelope)	99mm (#10 Envelope)	✓	
US Letter format (11" x 8½") Document printed with **middle address**	C-Fold	✓		186mm (#10 Envelope)	99mm (#10 Envelope)		✓	✓
US Letter format (11" x 8½") Document printed with **top address**	Z-Fold	✓			87mm (#10 Envelope)	99mm (#10 Envelope)	✓	✓
US Letter format (11" x 8½") Document printed with **top address**	Z-Fold		✓	192mm (#10 Envelope)		99mm (#10 Envelope)	✓	
US Letter format (11" x 8½") Document printed with **bottom address**	Z-Fold	✓		93mm (#10 Envelope)	99mm (#10 Envelope)		✓	✓
US Letter format (11" x 8½") Document printed with **top address**	V-Fold	✓		140mm			✓	✓
US Letter format (11" x 8½") Document printed with **top address**	V-Fold		✓		140mm		✓	
US Legal format (14" x 8½") Document printed with **top address**	Double Fwd-Fold	✓		159mm (#10 Envelope)		99mm (#10 Envelope)	✓	✓
US Legal format (14" x 8½") Document printed with **top address**	Double Fwd-Fold		✓		197mm (#10 Envelope)	99mm (#10 Envelope)	✓	

FORMS FROM ACCUMULATOR

NOTE:
ALL DOCUMENTS PASS THROUGH THE ACCUMULATOR WHEN READING

QTL-RND-GEN-00000102-A-00

Figure 5.39 – US Document Reading Orientations

5.1.4.9 Non-Reading Orientations

UK and European (Non-Reading) Document Sizes		Form Input Orientation at Hopper		Fold Panel Lenghts		
Job Description	Fold Type	Face Down Head First	Face Up Feet First	Fold Plate 1	Fold Plate 2	Fold Plate 3
A4 Form (297mm x 210mm) Document printed with **top address**	C-Fold		✓	78mm (121mm long envelope) 95mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)
A4 Form (297mm x 210mm) Document printed with **top address**	C-Fold	✓			219mm (121mm long envelope) 202mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)
A4 Form (297mm x 210mm) Document printed with **middle address**	C-Fold		✓	193mm (121mm long envelope) 199mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)	
A4 Form (297mm x 210mm) Document printed with **top address**	Z-Fold		✓		78mm (121mm long envelope) 95mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)
A4 Form (297mm x 210mm) Document printed with **top address**	Z-Fold	✓		219mm (121mm long envelope) 202mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)
A4 Form (297mm x 210mm) Document printed with **bottom address**	Z-Fold		✓	104mm (121mm long envelope) 98mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)	
A4 Form (297mm x 210mm) Document printed with **top address**	V-Fold		✓	149mm		
A4 Form (297mm x 210mm) Document printed with **top address**	V-Fold	✓			149mm	
European 16" form (406mm x 210mm) Document printed with **top address**	Double Fwd-Fold		✓	176mm (121mm long envelope) 198mm (110mm long envelope)		115mm (121mm long envelope) 104mm (110mm long envelope)
European 16" form (406mm x 210mm) Document printed with **top address**	Double Fwd-Fold	✓			230mm (121mm long envelope) 212mm (110mm long envelope)	115mm (121mm long envelope) 104mm (110mm long envelope)

FORMS FROM HOPPER

QTL-RND-GEN-00000103-A-00

Figure 5.40 – UK and European Document Non-Reading Orientations

US (Non-Reading) Document Sizes		Form Input Orientation at Hopper		Fold Panel Lenghts		
Job Description	Fold Type	Face Down Head First	Face Up Feet First	Fold Plate 1	Fold Plate 2	Fold Plate 3
US Letter format (11" x 8½") Document printed with **top address**	C-Fold		✔	87mm (#10 Envelope)		99mm (#10 Envelope)
US Letter format (11" x 8½") Document printed with **top address**	C-Fold	✔			192mm (#10 Envelope)	99mm (#10 Envelope)
US Letter format (11" x 8½") Document printed with **middle address**	C-Fold		✔	186mm (#10 Envelope)	99mm (#10 Envelope)	
US Letter format (11" x 8½") Document printed with **top address**	Z-Fold		✔		87mm (#10 Envelope)	99mm (#10 Envelope)
US Letter format (11" x 8½") Document printed with **top address**	Z-Fold	✔		192mm (#10 Envelope)		99mm (#10 Envelope)
US Letter format (11" x 8½") Document printed with **bottom address**	Z-Fold		✔	93mm (#10 Envelope)	99mm (#10 Envelope)	
US Letter format (11" x 8½") Document printed with **top address**	V-Fold		✔	140mm		
US Letter format (11" x 8½") Document printed with **top address**	V-Fold	✔			140mm	
US Legal format (14" x 8½") Document printed with **top address**	Double Fwd-Fold		✔	159mm (#10 Envelope)		99mm (#10 Envelope)
US Legal format (14" x 8½") Document printed with **top address**	Double Fwd-Fold	✔			197mm (#10 Envelope)	99mm (#10 Envelope)

FORMS FROM HOPPER

QTL-RND-GEN-00000104-A-00

Figure 5.41 – US Document Non-Reading Orientations

5.1.5   Collate Clam Paper Control Adjustment

The Paper Control lever on the collate clam is used to help control skewing and hold packs down, and can be adjusted to suit single sheets, lightweight documents, and different packs or inserts of varying thickness.

1. Raise the Insert Head perspex top cover to access the collate clam as shown in Figure 5.42.
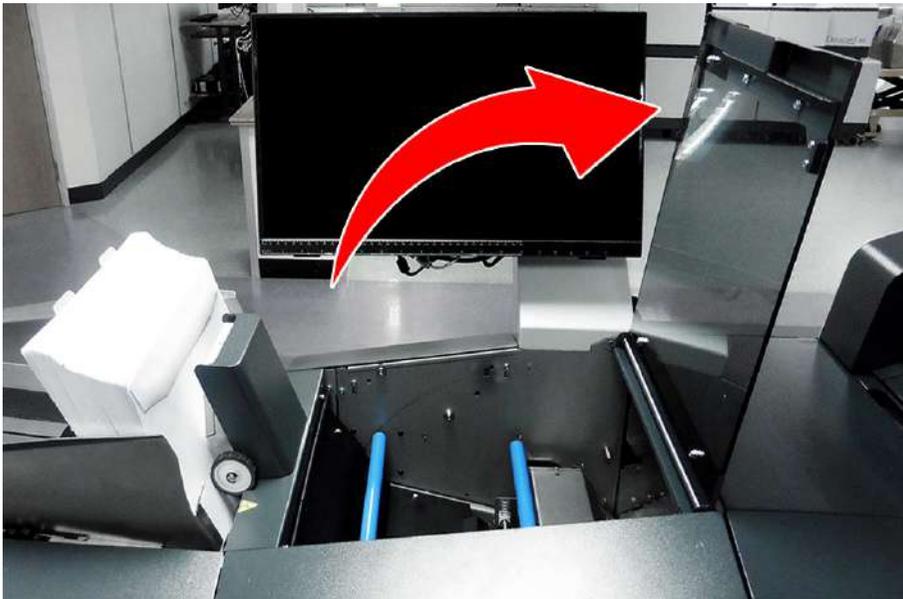
QTL-RND-OPS-00000131-A-00

Figure 5.42 – Raising the Insert Head perspex top cover

2. The paper control lever can be adjust according to the following:

-   **Upwards** (towards exit) - For thick packs or if lightweight prime documents are struggling to get into the collate pocket.
-   **Downwards** - For single sheets or inserts of varying thickness.

Note:

The lever can also be set halfway. For best results, adjust according to the required job being processed.

3. Adjust the paper control lever according to the job requirements as shown in Figure 5.43.
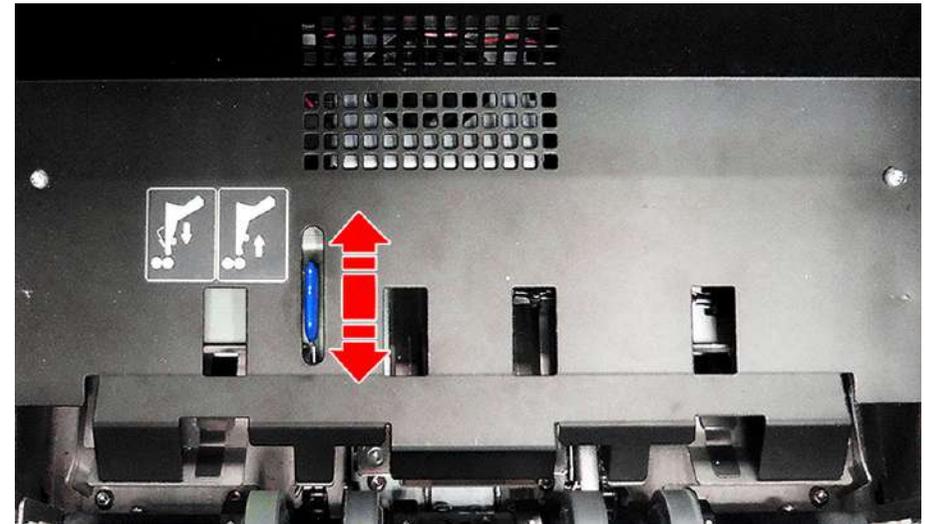
QTL-RND-OPS-00000132-A-00

Figure 5.43 – Adjusting the paper control lever

4. Lower the perspex top cover of the Insert Head back down once the desired adjustment has been made.

5.1.6   Insert Head Overguide Adjustment

The overguide is important for the control of different sized envelopes as they exit the insertion area, and will need adjusting accordingly.

1.   Lower the Insert Head side cover (operator side) as shown in Figure 5.44.
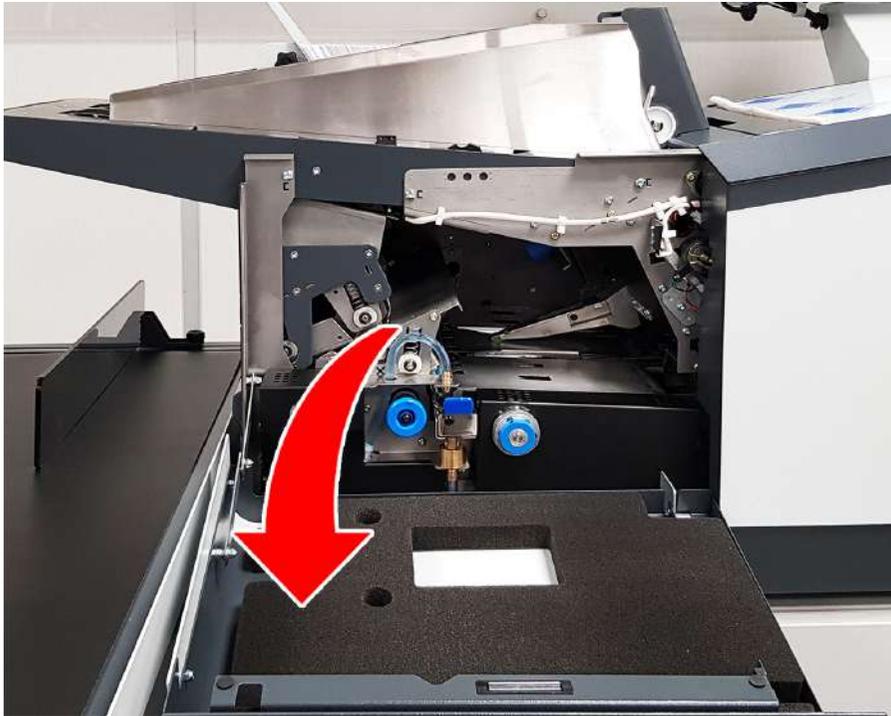
QTL-RND-OPS-00000167-A-00

Figure 5.44 – Lowering the Insert head side cover

2.   Ensure the overguide inside the closer cavity is lowered as shown in Figure 5.45 for smaller C6/5, #10 and C5 envelopes.
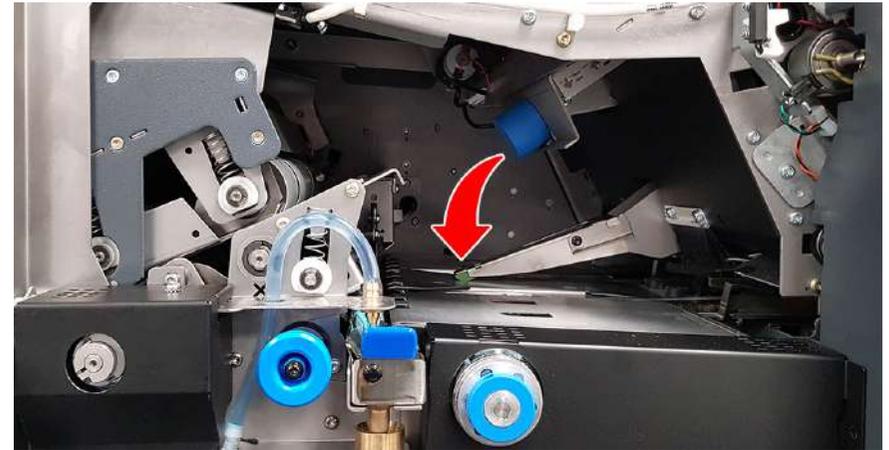
QTL-RND-OPS-00000474-A-00

Figure 5.45 – Raising the overguide latching it into place

3.   Raise the overguide inside the closer cavity and latch it into place as shown in Figure 5.46 for larger C4 envelopes.
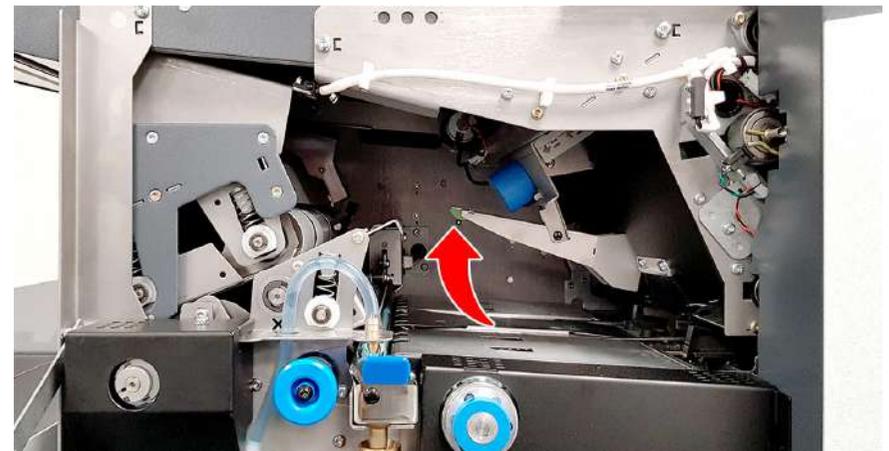
QTL-RND-OPS-00000148-A-00

Figure 5.46 – Raising the overguide latching it into place

5.1.7   Insert Head Catch Tray Adjustment

The Insert Head can be optionally fitted with a catch tray at the exit, receiving processed envelopes in a stack to allow subsequent hand removal, and can be adjusted to suit a variety of envelope sizes.

1. To adjust the catch tray, first loosen the thumb screw knob on the underside, and side of the catch tray.

2. Move the stops as required, adjusting the catch tray according to the envelope size being processed as shown in Figure 5.47.

QTL-RND-OPS-00000133-A-00

Figure 5.47 – Adjusting the Insert Head catch tray

3. Re-tighten the thumb screw knobs once the desired adjustments have been made.

5.1.8   Output Conveyor BackStop Adjustment

To help envelopes feed onto the conveyor properly, the Output Conveyor backstop or rollers need adjusting according to the size of envelopes being processed for the particular job.

5.1.8.1   Angled Version (Default)

1. To adjust the Output Conveyor backstop, first loosen the thumb screw knob.

2. Adjust the backstop so that the ejecting envelopes contacts the backstop plate halfway up and then falls fully onto the conveyor surface as shown in Figure 5.48.
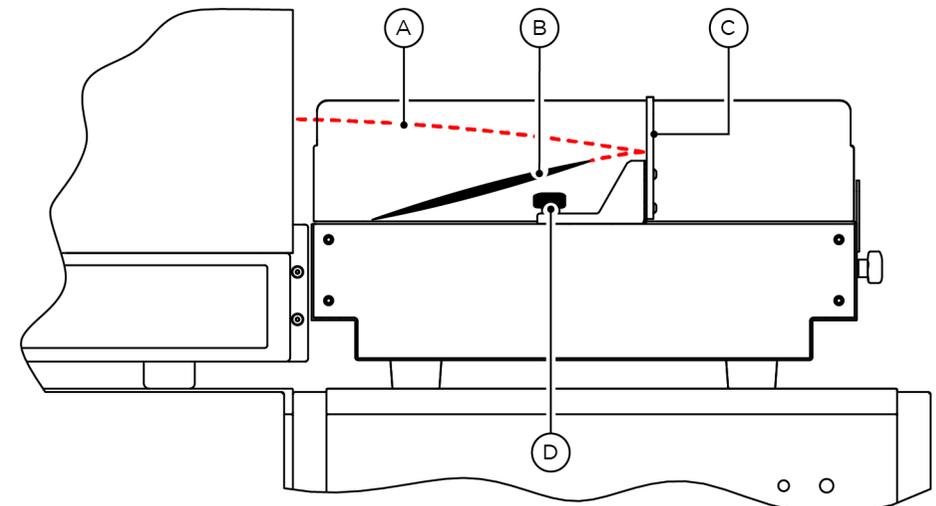
QTL-RND-OPS-00000134-A-00

Figure 5.48 – Adjusting the Output Conveyor backstop

A. Ejected envelope path

B. Envelope

C. Backstop

D. Adjustment knob

3. Re-tighten the thumb screw knob once the desired adjustments have been made.

5.1.8.2   In-line Version

1. To adjust the Output Conveyor rollers, first loosen the thumb screw knobs on both sides.

2. Adjust the rollers so that the ejecting envelopes contacts the nip (pinch) point of the rollers at the conveyor surface, and then falls fully onto the surface as shown in Figure 5.49.
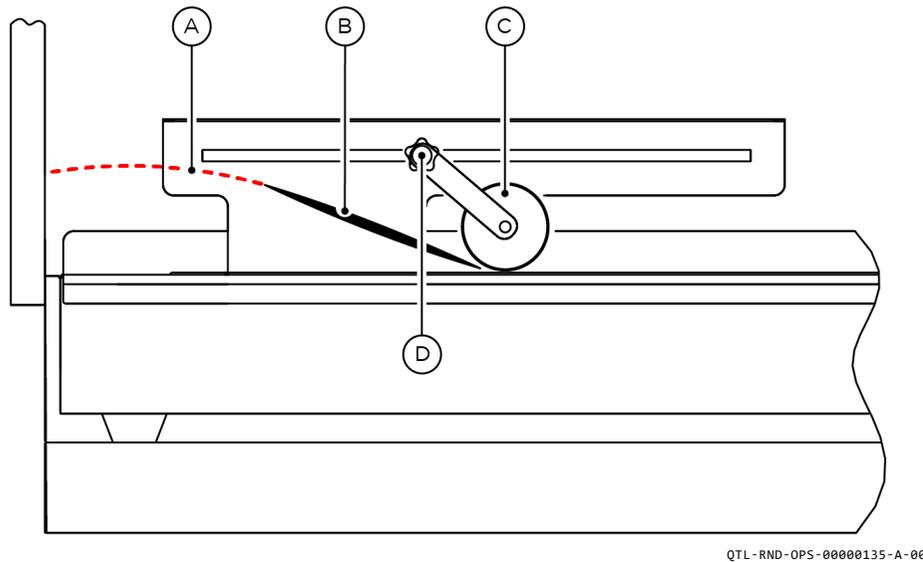
QTL-RND-OPS-00000135-A-00

Figure 5.49 – Adjusting the Output Conveyor rollers

A.   Ejected envelope path

B.   Envelope

C.   Rollers

D.   Adjustment knob

3. Re-tighten the thumb screw knobs once the desired adjustments have been made.

5.1.9   Output Conveyor Backrest Adjustment

When the envelopes reach the end of the conveyor, they will stack up against the backrest which can be adjusted to suit the required amount of tilt.

1. To adjust the Output Conveyor backrest, first loosen the thumb screw knobs on each side.

2. Adjust the tilt of the backrest to a satisfied angle as shown in Figure 5.50.
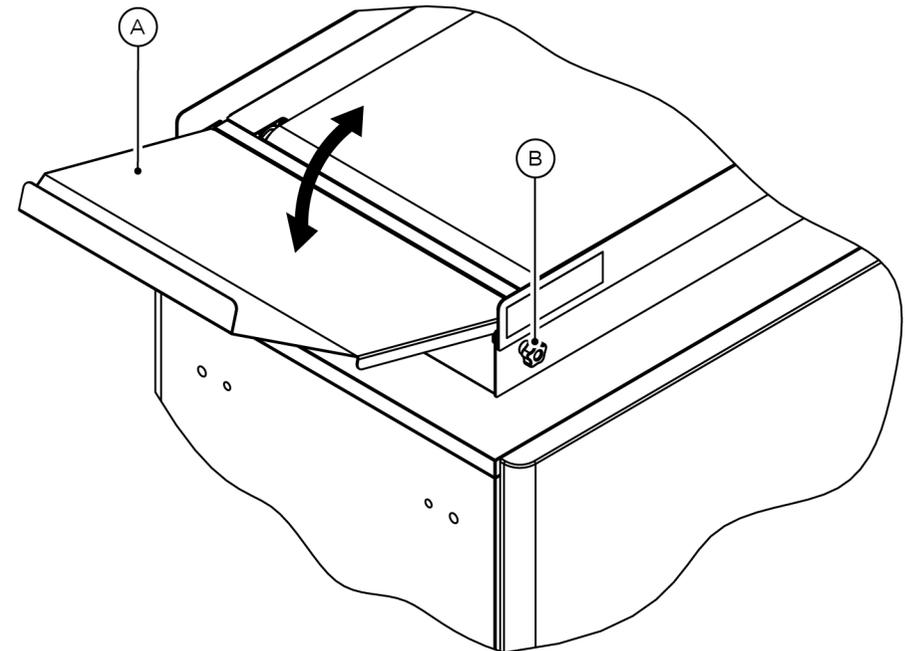
QTL-RND-OPS-00000136-A-00

Figure 5.50 – Adjusting the Output Conveyor backrest

A.   Backrest

B.   Adjustment knob

3. Re-tighten the thumb screw knobs once the desired adjustments have been made.

5.1.10   Output Sorter Catch Tray Adjustment

The Output Sorter can be optionally fitted with a catch tray at either exit, receiving processed envelopes in a stack to allow subsequent hand removal, and can be adjusted to suit a variety of envelope sizes.

1. To adjust the catch tray, first loosen the thumb screw knob on the underside of the catch tray.

2. Move the stops as required, adjusting the catch tray according to the envelope size being processed as shown in Figure 5.51.

QTL-RND-OPS-00000137-A-00

Figure 5.51 – Adjusting the Output Sorter catch tray

3. Re-tighten the thumb screw knob once the desired adjustments have been made.

5.1.11   Turner Side Guide Panel Adjustment

If the job is programmed to turn the envelope, the side guide panel must be lowered.

Note:

For all other jobs, the panel must be raised

1. To adjust the side guide panel, first loosen the thumb screw knobs on each end.

2. Adjust the side guide panel accordingly as shown in Figure 5.52.

QTL-RND-OPS-00000138-A-00

Figure 5.52 – Adjusting the Turner side guide panel

3. Re-tighten the thumb screw knobs once the desired adjustments have been made.

5.1.12   Turner Backstop Adjustment

If the Turner is fitted directly to the Insert Head exit, an adjustable backstop will be attached.

Note:

The backstop is not fitted when the Turner is fitted to an Output Sorter.

1. To adjust the backstop, first loosen the thumb screw knob.

2. Place an envelope on the track, touching the rollers inside the backstop.

3. Adjust the backstop so that the opposite edge of the envelope lies approximately 35mm from the datum side-guide on the other side, as shown in Figure 5.53.
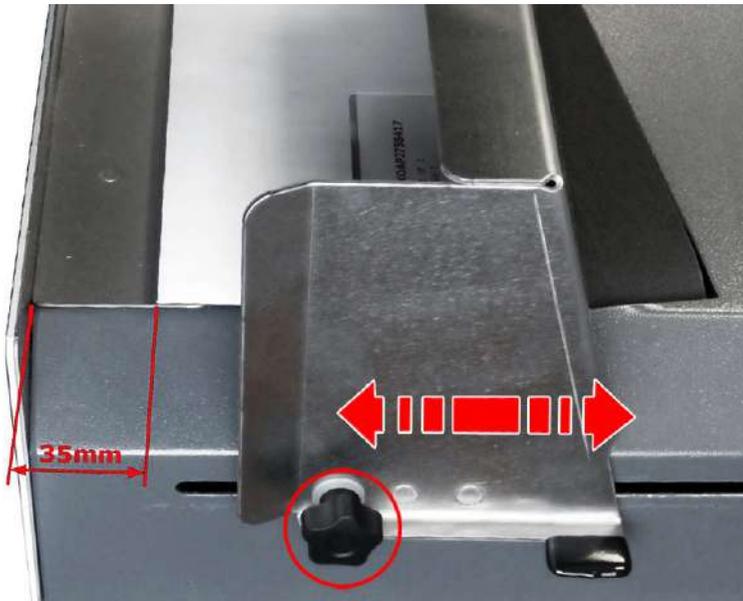
QTL-RND-OPS-00000139-A-00

Figure 5.53 – Adjusting the Turner backstop

4. Re-tighten the thumb screw knob once the desired adjustments have been made.

5.1.13   Infeed Rollers Adjustment

The infeed rollers can be adjusted to provide drive onto envelopes if there are problems transferring them to the turner exit.

To adjust the infeed rollers, simply lower one or both rollers as needed, shown in Figure 5.54.

QTL-RND-OPS-00000140-A-00

Figure 5.54 – Adjusting the infeed rollers

5.2   Fine Tuning a Job

1. To access fine tuning, first select a job then navigate to the Run Screen.

    Note:

    Ability to change settings is dependant upon the user access rights granted.

    See section **3.6.2 User Access Rights** for further assistance.

2. Fine tuning can then be accessed by selecting the relevant unit, tray, or document unit needed tuning in the Run Screen GUI as shown in Figure 5.55.
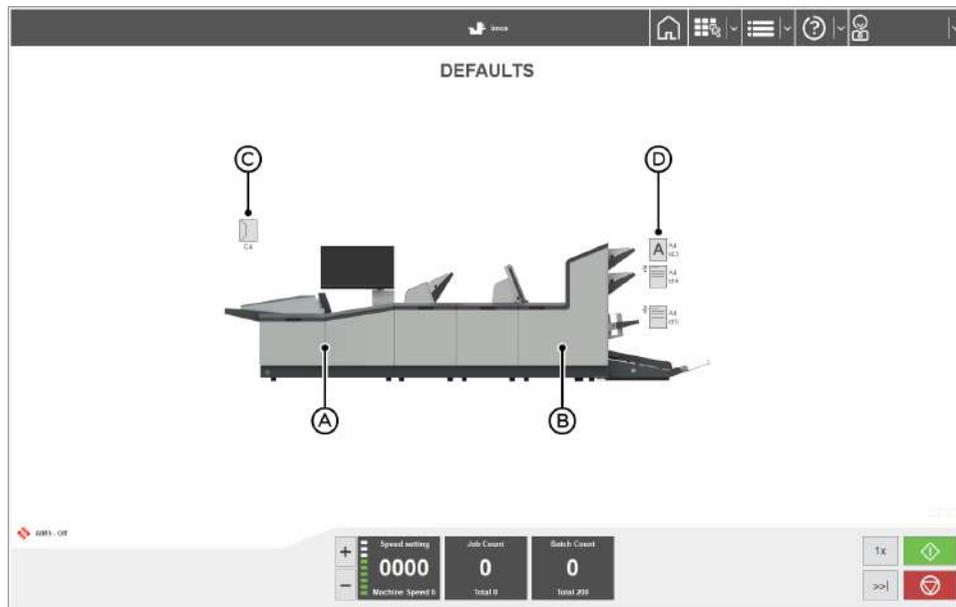
QTL-RND-SCR-00000465-A-00

Figure 5.55 – Accessing Fine Tuning from the Run Screen

A.   Insert Head

B.   Tower Folder

C.   Inserter envelope

D.   Tower Folder document.

!   Any fine tuning adjustments made will only apply to the current job selected.

5.2.1   Unit Fine Tuning

1. Select a unit (e.g. Insert Head/Tower Folder) on the Run Screen GUI to open the fine tuning dialog box options.

2. Press '**Advanced**' to view all available options for fine tuning the unit select as shown in Figure 5.56.

Note:

Most envelopes will run at default settings, only adjust if required.

QTL-RND-SCR-00000098-A-00

Figure 5.56 – Unit fine tuning

3. Make any necessary adjustments as required. Depending upon which unit is selected, the available options for fine tuning are as follows:

Collating

- **Collate Pkt. Adj (0.1mm)** - Adjusts the width of collate pocket guides in increments of 0.1mm.

- **Adjust Pawl Pause Pos** - Adjusts the position the pawls stop as the mailset enters the wetter area. Stops the mailset being damaged when the pawls rotate into the chassis.

  Select '**+**' to adjust towards the exit, and select '**-**' to adjust away from the exit.

- **Collate Slowdown** - Select '**Not on Last Form**' for thick packs if the final document in the pack does not feed fully into the collate pocket.

Envelope Insertion

- **Fingers Adj (0.1mm)** - Adjusts the overall width of insert fingers in increments of 0.1mm.

- **Adjust Envelope Stop (mm)** - Adjusts the stop position for insertion in increments of 1mm. Select '**+**' to adjust towards the exit, and select '**-**' to adjust away from the exit.

- **Finger Sequence** - Adjust accordingly if envelopes are not opening properly.

- **Insert in Env Position (mm)** - Adjusts the pack insertion into the envelope and allows the document set to be pushed further into the envelope. - the documents are not pushed in as far. Select '**+**' to adjust past the envelope flap crease in increments of 1mm.

- **Envelope Blower** - Adjusts the opening of the envelope. Select '**High**' for thick packs, or '**Low**' for single sheets or thin packs.

Wetting and Sealing

- **Seal Time (ms)** - Adjusts the time (ms) the envelope is held with the flap under the sealing rollers.

- **Adjust Wetter Start (mm)** - Adjusts where the wetter beam starts. Select '**+**' to adjust the start point towards insertion area in increments of 1mm.

- **Adjust Env Seal Pos (mm)** - Adjusts the seal position of the envelope. Select '**+**' to adjust the position of the envelope further in towards the seal rollers in increments of 1mm.

▪ **Adjust Env Reverse Pos (mm)** - Adjusts the envelope forward travel after wetting, before reversing into sealing rollers.

Note:

High-windowed envelopes should be set between +20mm to +50mm.

Select '**+**' to adjust the envelope further into output rollers, towards the exit in increments of 1mm.

Miscellaneous

▪ **Linear Speed** - Adjusts the speed of the Insert Head to the filled envelope path only. Select a lower speed if packs are not being fully inserted (e.g. long packs).

▪ **Env Conveyor Drive Delay** - Adjusts the time delay of envelopes on the Envelope feed conveyor before the conveyor switches back on. Select a higher number if envelopes are 'bunching'.

4. Press '**Ok**' once the desired settings have been made.

5.2.2   Insert Head Hopper Fine Tuning

1. Select the Insert Head Hopper document on the Run Screen GUI to open the fine tuning dialog box options as shown in Figure 5.57.
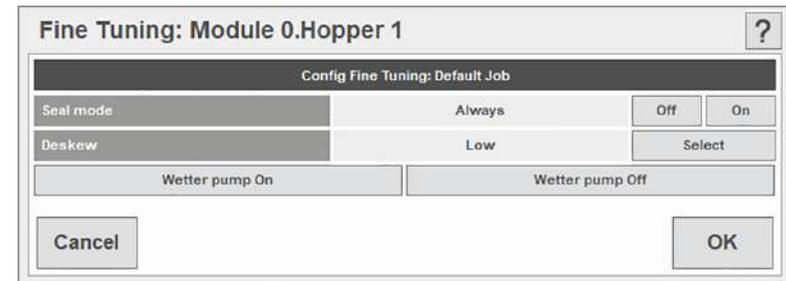
QTL-RND-SCR-00000099-A-00

Figure 5.57 – Insert Head hopper fine tuning

2. Make any necessary adjustments as required. The available options for fine tuning the Insert Head hopper document are as follows:

▪ **Seal Mode** - Adjusts the seal mode of envelopes. Select '**Off**' if manual or later hand insertion is required.

▪ **Deskew** - Adjusts the skew of documents. If skewing occurs, select '**Low**' if possible, select '**High**' setting only if necessary.

▪ **Wetter Pump On/Off** - Turns the Wetter Pump 'On' or 'Off'. Switch pump '**On**' for few seconds if wetter tank has dried out - Wetter tank will automatically refill in normal use.

3. Press '**Ok**' once the desired settings have been made.

5.2.3 Document Fine Tuning

1. Select a Versatile Feeder or Tower Folder Document on the Run Screen GUI to open the fine tuning dialog box options as shown in Figure 5.58.

Note:

Options available will depend upon weather a Versatile Feeder, Feeder Folder, or Tower Folder is fitted, and also whether a reading unit is fitted.
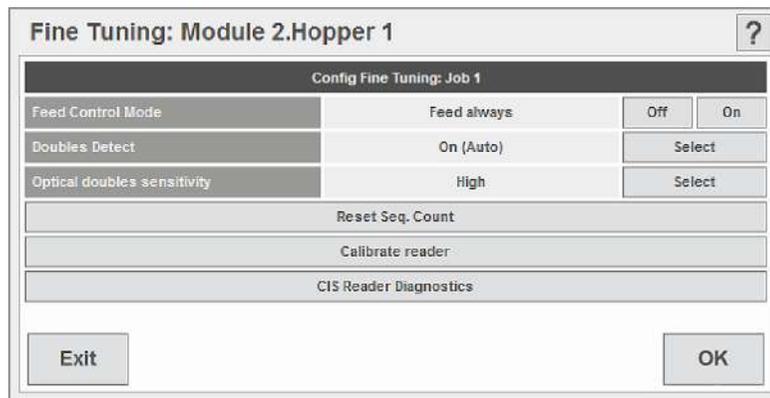
QTL-RND-SCR-00000100-A-00

Figure 5.58 – Document fine tuning

2. Make any necessary adjustments as required.

Depending upon which document is selected, the available options for fine tuning are as follows:

- **Feed Control Mode** - Turns feeding of the selected document unit on or off.
  If turned '**Off**', the document unit is disused until turned back on.

- **Doubles Detect** - Turn '**Off**' if booklets or thick inserts used (Tower Folder only). If turned on, select '**On (optical)**', '**On (mechanical)**', or '**Auto**' (Versatile Feeder only).

- **Optical Doubles Sensitivity** - Available only if '**On (optical)**' is selected.
  Low is more tolerant of high contrast printing (Versatile Feeder only).

The following options are available only if a reading unit is fitted:

- **Reset Seq. Count** - Resets the sequence count.
  Select this option to reset the sequence, if sequence BCR/OMR marks are in use and the job is disrupted.

- **Calibrate Reader** - Select this option, following the on-screen instructions to calibrate the CIS reader.

- **CIS Reader Diagnostics** - Select this option to display the label of all documents in the group (up to 10), as seen by the CIS reader. The diagnostics confirms if labels were read entirely (e.g. by compared images).

See section 5.2.3.1 CIS Reader Diagnostics for further diagnostics options.

3. Press '**Ok**' once the desired settings have been made.

5.2.3.1   CIS Reader Diagnostics

Select '**Request Data**' in the bottom right corner of the Reader Diagnostics screen to request the following data as shown in Figure 5.59.

QTL-RND-SCR-00000175-A-00

Figure 5.59 – Request Data

Main

Select '**Main**' to display the decoded CIS image as shown in Figure 5.60.

QTL-RND-SCR-00000176-A-00
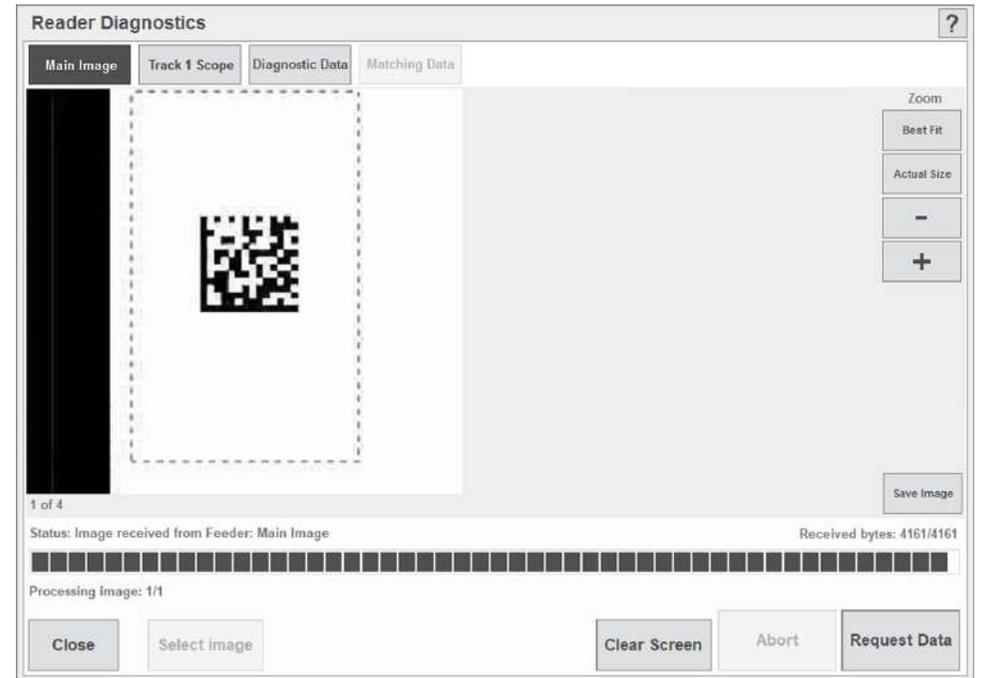
Figure 5.60 – CIS image

To retrieve multiple CIS images, follow the procedures set out below:

1. Select '**Request Data**' in the bottom right corner of the Reader Diagnostics screen as shown in Figure 5.60.

2. Once the image has been retrieved, press '**Request Data**' again, and then select either '**Retrieve next Main image [Main image 2]**' or '**Retrieve all remaining Main images**' in the Request Data dialog box as shown in Figure 5.61.

QTL-RND-SCR-00000470-A-00

Figure 5.61 – Retrieving images

3. You can then select which image to view, by pressing '**Select image**' in the bottom left corner of the Reader Diagnostics screen as shown in Figure 5.60.

A. If Retrieve next Main image [Main image 2] is selected, you can then select which image to view, '**Main Image 1**' or '**Main Image 2**' as shown in Figure 5.62.

QTL-RND-SCR-00000471-A-00
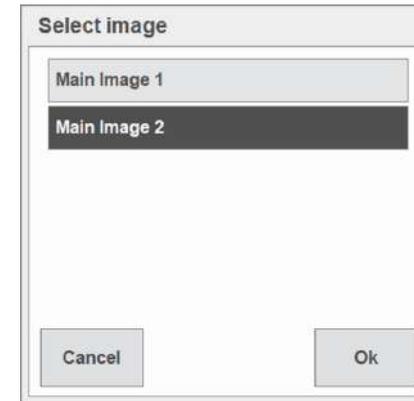
Figure 5.62 – Selecting Main Image

B. If Retrieve all remaining Main images is selected, you can then select from all the stored images as shown in Figure 5.63.

QTL-RND-SCR-00000472-A-00
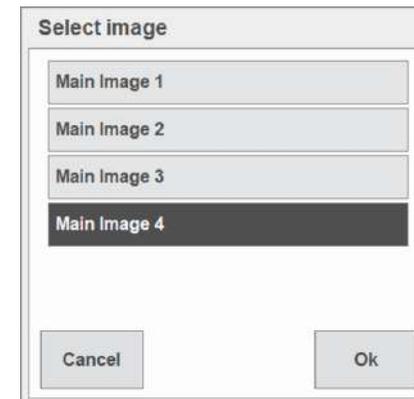
Figure 5.63 – Selecting from all stored images

Scope

Select '**Scope**' to check the OMR marks against the programmed pitch of the OMR as shown in Figure 5.64.
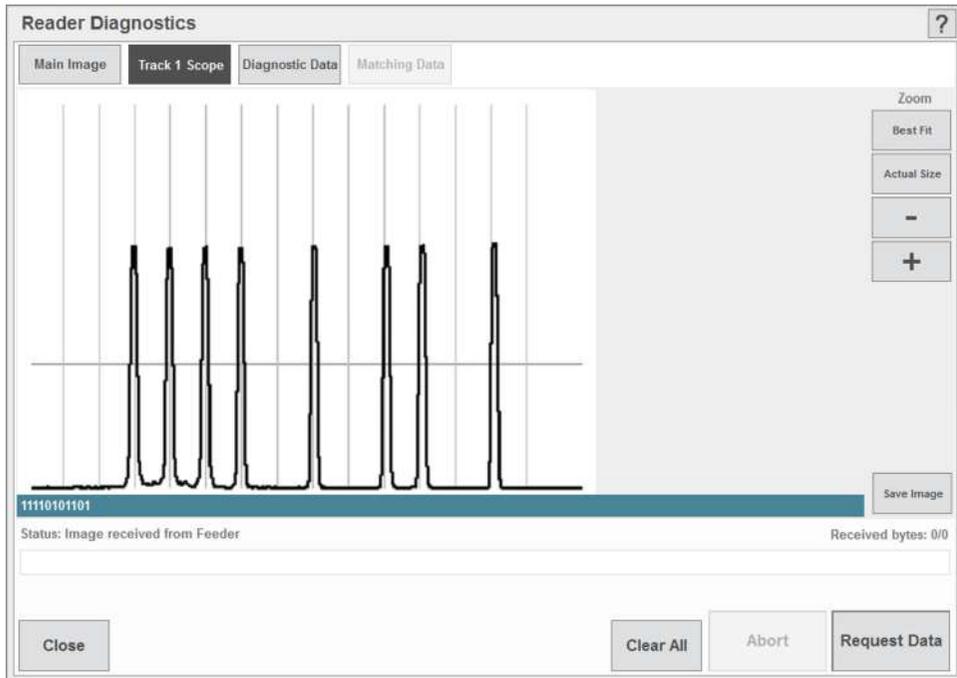
QTL-RND-SCR-00000177-A-00

Figure 5.64 – Scope (Track 1)

Diagnostic Data

Select '**Diagnostic Data**' to display details of the last 10 (most recent) barcodes that were read as shown in Figure 5.65.
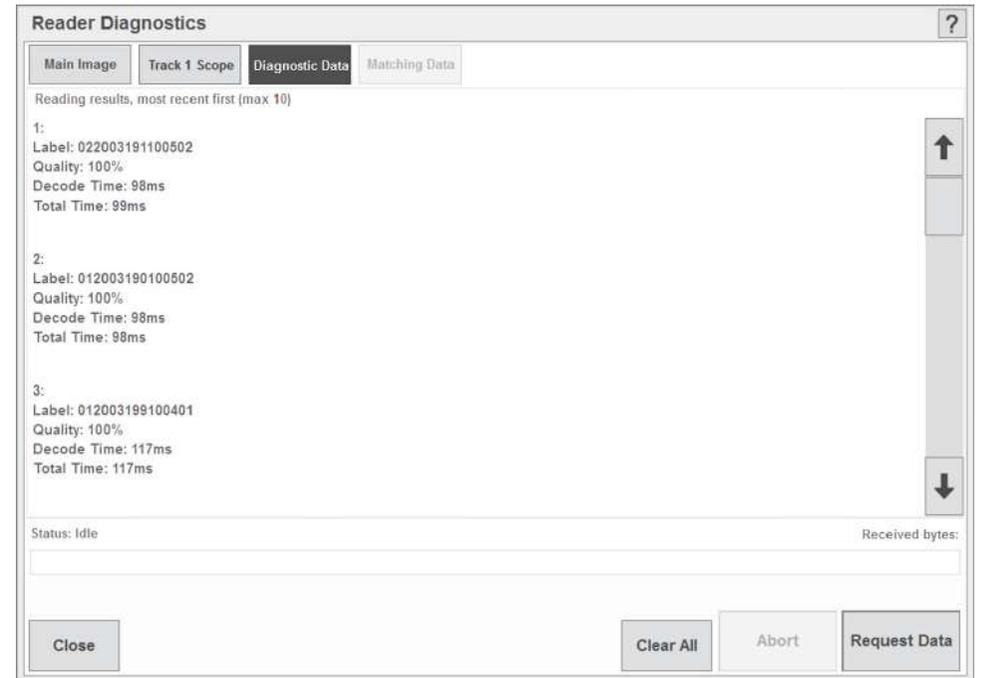
QTL-RND-SCR-00000178-A-00

Figure 5.65 – Diagnostic Data

Matching Data

If running a matching job, select '**Matching Data**' to check and display a defined field in the barcode of both the prime document and matched document or insert as shown in Figure 5.66.

Figure 5.66 – Matching Data

5.3   Running a Job

1. To begin running a job, select the required job from the jobs list in the Jobs Screen and press '**Accept**' as shown in Figure 5.67.

Figure 5.67 – Selecting a job to run from the jobs list

2. Load the machine with the correct stationery required for the selected job.

> **!** Ensure settings and adjustments to the machine units have been made according to the job requirement prior to running the job.

> 📄 See section **5.1 Setting up a Job** for further assistance.

3. The Run screen will then display once a job has been accepted, and is now ready to run by pressing the '**Run**' button.

> See section 3.4 Run Screen for further assistance.

> A job can also run by pressing the remote run button on the side of the Tower Folder accumulator. See section 5.3.1 Remote Run Button for further assistance.

> It is advisable to run a single cycle (1x procedure) prior to running a full job. See section 5.3.2 Single Cycle 1 x Procedure for further assistance.

5.3.1   Remote Run Button

A remote run button is incorporated into the side panel of the 7700 Series Tower Folder accumulator as shown in Figure 5.68, and can be used to run a job remotely without having to press the run button within IMOS.

QTL-RND-OPS-00000464-A-00

Figure 5.68 – Remote run button

5.3.2   Single Cycle 1 x Procedure

Before running a full job, it is advisable to run a single cycle (1x procedure), to establish whether the tested mailset runs smoothly.

Press the '**1x**' button in the Run Screen as shown in Figure 5.69 to perform a single cycle and begin testing the mailset.
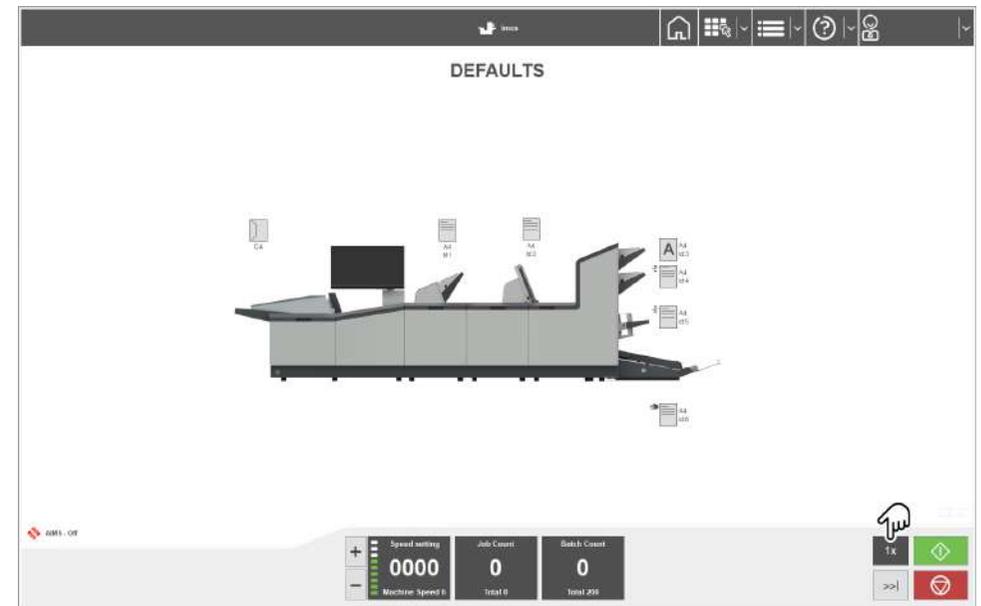
QTL-RND-SCR-00000467-A-00

Figure 5.69 – Running a single cycle 1x procedure

Adjustment options for testing the mailset will become available once the single cycle has been initiated.

> See section 3.4.1 Testing the Mailset for further assistance.

5.3.3   Cascading Job

Cascading allows '**all available**' hoppers to be loaded with the same document type.

- Maximum of 2 x adjacent hoppers from Versatile Feeders
- Maximum of 2 x adjacent hoppers from Feeder Folders
- Maximum of 3 x mark reading hoppers from a Tower Folder
- Maximum of 4 x non-reading hoppers from a Tower Folder

The inserting system automatically switches to the next hopper when the current active (feeding) hopper is empty and vice versa.

As shown in Figure 5.70, when a hopper is empty (indicated in yellow), it may be refilled while the active hopper is running, so the inserting system can keep running without having to stop for refilling.
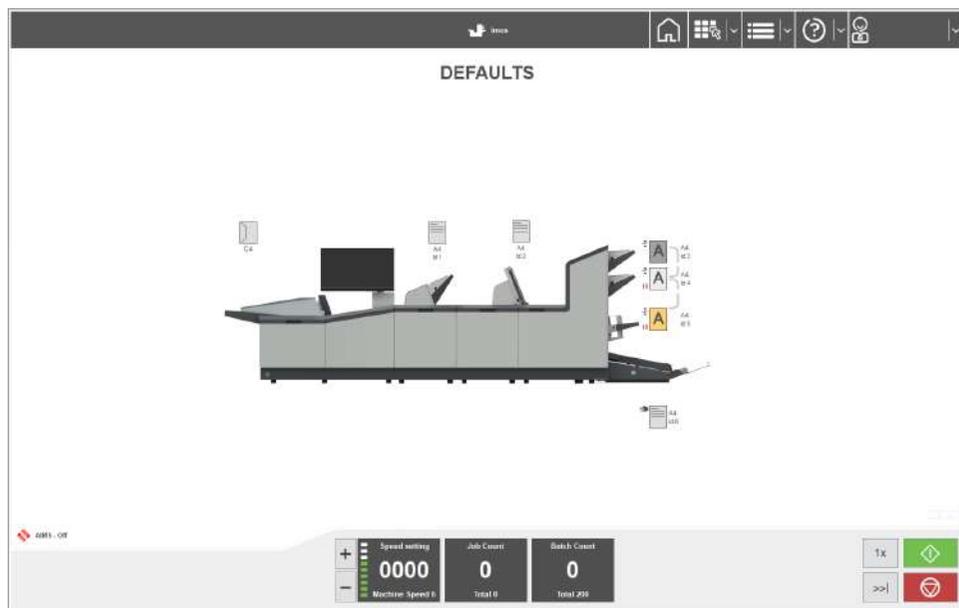
QTL-RND-SCR-00000468-A-00

Figure 5.70 – Running a Cascading job

Note:

Cascading enabled hoppers are indicated by the grey bracket symbols '}', and inactive hoppers are indicated by the red pause symbol '**II**' as shown in Figure 5.70.

> ! Cascading must first be enabled in the document settings to be used for the selected job.

> See section 4.2.3 Document Mailset for further assistance.

The following applies when using Cascading for a Tower Folder with a 1000-Sheet feeder (not applicable to 500-Sheet feeders),

1. Press the '**Run**' button while the machine is still running, after reloading the empty hopper.

2. Paper is then fed to pre-load, otherwise, machine will stop with a full hopper.

3. Press the '**Run**' button to continue.

5.3.4   Daily Mail

Daily mail function can be used as an optional feature on a Versatile Feeder, Feeder Folder, or Tower Folder, allowing groups of documents or packs to be hand-fed, stapled or not.

They will then be folded, and inserted into an envelope (Tower Folder only).

Note:

If other hoppers are loaded, further forms can be collated.

Daily Mail must first be selected as the hopper feed mode in the document settings to be used for the selected job.

See section 4.2.3 Document Mailset for further assistance.

See section 8.8 Daily Mail Specifications for further assistance.

5.3.4.1   Daily Mail - Versatile Feeder

To begin using the daily mail function for the Versatile Feeder, first ensure '**Daily Mail**' has been selected as the hopper feed mode in the document settings.

See section 4.2.3 Document Mailset for further assistance.

Follow the procedure set out below to set the separator gap on the Versatile Feeder hopper to suit the group of documents or packs being processed.

1. Open the separator gap on the Versatile Feeder hopper wide enough to insert the required stationery needed for processing, corner first.

See section 5.1.2 Loading the Versatile Feeder Hopper for further assistance.

2. Tighten the gap until it lightly grips the stationery as shown in Figure 5.71, then open the gap by 1 turn (1mm).

QTL-RND-OPS-00000141-A-00

Figure 5.71 – Adjusting the separator gap for Daily Mail - Versatile Feeder

3. If the document is an 80gsm sheet, set the separator gap to 1mm.

4. Press 'Run' on the Run Screen to begin processing, and feed the daily post into the hopper within 30 seconds, after this, press 'Run' again.

5. To disable the daily mail function, navigate to the document settings and turn the hopper feed mode to 'Default'.

5.3.4.2   Daily Mail - Feeder Folder

The hand feeder for daily mail is an available option on a Feeder Folder, however the option is not available if a CIS reader is installed on the unit.

To begin using the daily mail function for the Feeder Folder, first ensure 'Daily Mail' has been selected as the hopper feed mode in the document settings.

> See section 4.2.3 Document Mailset for further assistance.

1. Adjust the side guides accordingly to suit the document / form size (A4 or Letter) as shown in Figure 5.72.
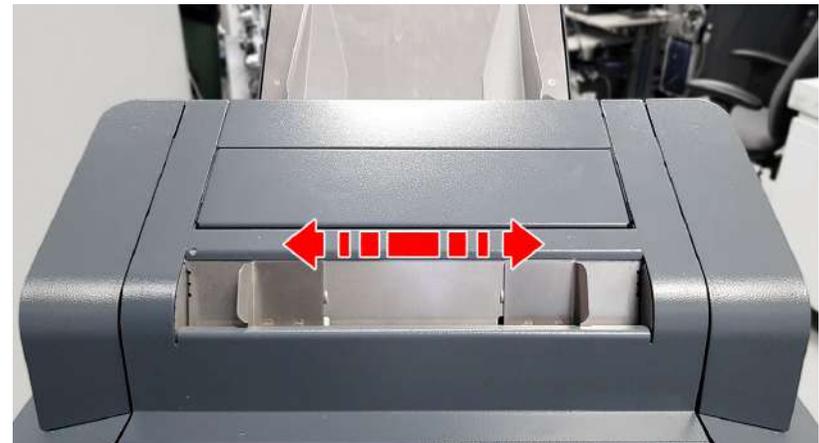
QTL-RND-OPS-00000465-A-00

Figure 5.72 – Adjusting the Feeder Folder hand feed side guides

2. Press 'Run' on the Run Screen to begin processing, and feed the daily post into the hand feed hopper within 30 seconds, after this, press 'Run' again.

3. To disable the daily mail function, navigate to the document settings and turn the hopper feed mode to 'Default'.

5.3.4.3   Daily Mail - Tower Folder

To begin using the daily mail function for the Tower Folder, first ensure '**Daily Mail**' has been selected as the hopper feed mode in the document settings, and the divert tray on the Tower Folder accumulator is attached.

Daily mail for the Tower Folder can be used in two feed modes:

▪ **Auto feed** - Pauses 1 or 2 seconds before feeding.

▪ **Manual feed** - Pass finger over divert sensor to feed document.

Follow the procedures set out below for using Daily mail.

1. Raise the accumulator overguide to lock it into place, then adjust the accumulator side guides to suit the required stationery needed.

> See section 5.1.4.5 Accumulator Side Guide Adjustment for further assistance.

2. Attach the divert tray to the accumulator for the appropriate feed mode (Auto feed mode or Manual feed mode).

> See section 5.1.4.6 Divert Tray Fitment for further assistance.

3. Adjust the divert tray side guides to match the accumulator.

> See section 5.1.4.7 Divert Tray Side Guide Adjustment for further assistance.

4. Press '**Run**' on the Run Screen to begin processing, and select '**Auto Feed**' in the confirmation dialog box as shown in Figure 5.73.

QTL-RND-SCR-00000103-A-00

Figure 5.73 – Confirming the daily mail feed mode

5. Once the machine begins running, feed the daily post fully into the accumulator within 30 seconds, after this, press '**Run**' again.

Note:

For Manual feed mode, the divert sensor on the accumulator shown in Figure 5.74 must be covered (i.e. by finger) to begin feeding.
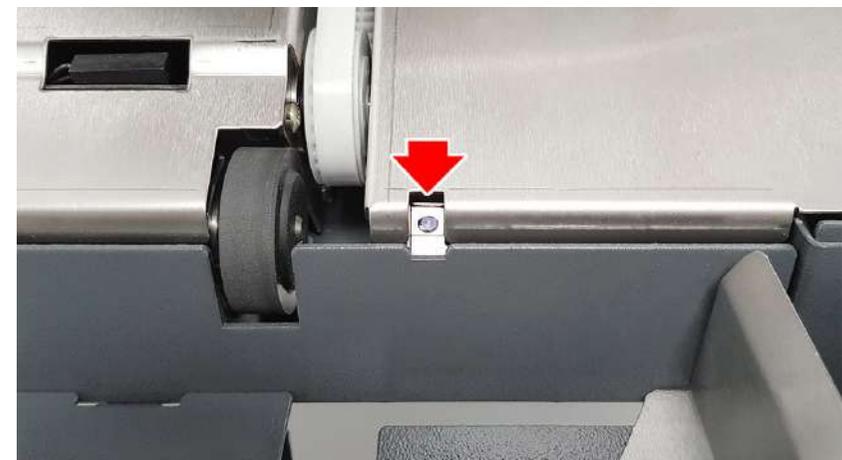
QTL-RND-OPS-00000468-A-00

Figure 5.74 – Accumulator divert sensor

6. To disable the daily mail function, navigate to the document settings and turn the hopper feed mode to '**Default**'.

Operator Maintenance   6

WARNING

Improper installation, use, adjustment, alteration, service and or maintenance may result in property damage and or serious bodily injury!

> Ensure all safety information detailed in section **1.3 Safety** including its sub-sections is read and understood in its entirety before installation, operation, maintenance and or servicing of this machine!

6.1   Cleaning the Machine

⚠️ Before cleaning, maintenance, or servicing, the machine must be completely isolated from the power source. Ensure the toggle switch located at the rear of the Insert Head is in the off position, and unplug the mains power cable completely from the electrical power source.

After processing large numbers of inserts, there may be a build up of grime and dust on the rollers, and paper dust may obscure the optical sensors impairing efficiency.

To ensure the machine continues to operate effectively, the rollers and sensors should be cleaned periodically, and particularly if a large run is envisaged.

Note:

If operating problems occur, the rollers and sensors should always be cleaned first before taking further action.

❗ Avoid using compressed air which can blow the dust around inside the machine. Dust should be vaccuumed from inside the machine, except when cleaning sensors.

📄 See section 6.1.1 Cleaning Sensors for further assistance.

6.1.1   Cleaning Sensors

The machine uses optical sensors to track the movement of mail-pieces along the paper path, and must be regularly cleaned to prevent false readings. Optical sensors consist of the following two halves which both need thorough cleaning:

- Emitter
- Receiver

Note:

Some reflective sensors are in a self contained unit.

❗ Arrows stamped into the chassis identify where the jet of an invertible non-flammable air-duster should be directed to clean most sensors. Ensure the sensor lens is cleaned, and not the retaining bush next to it.

❗ It is recommended to use an approved invertible non-flammable air-duster.

6.1.1.1   Cleaning Insert Head Sensors

1. Raise the Insert Head perspex top cover to access the collate clam for cleaning the sensors inside the collation area.

2. Lift the collate clam (closest to envelope hopper) so it locks into place as shown in Figure 6.1.
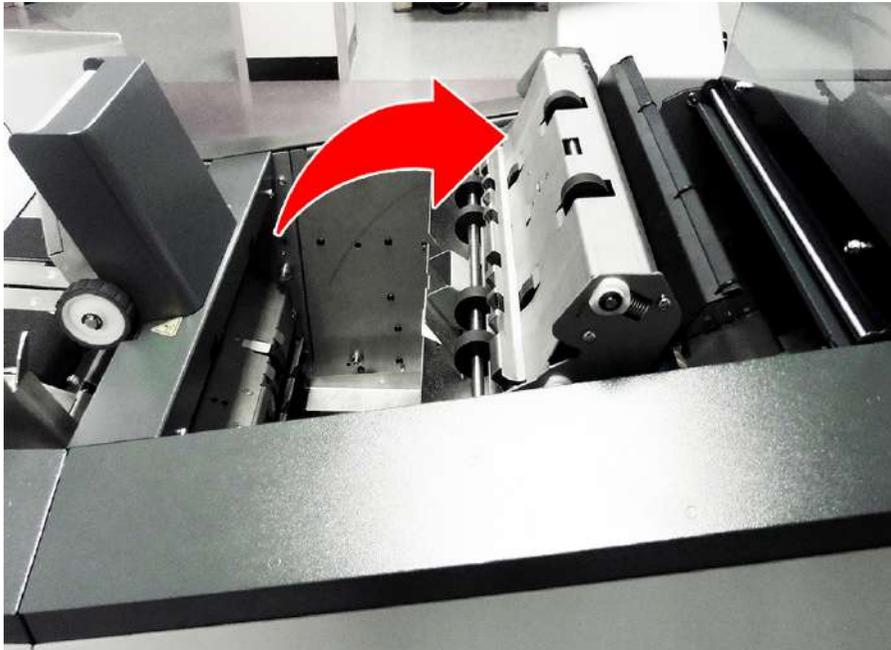
QTL-RND-OPS-00000143-A-00

Figure 6.1 – Lifting the collate clam locking it into place

3. Clean the envelope feed and deskew sensors as shown in Figure 6.2 (looking towards the envelope hopper).
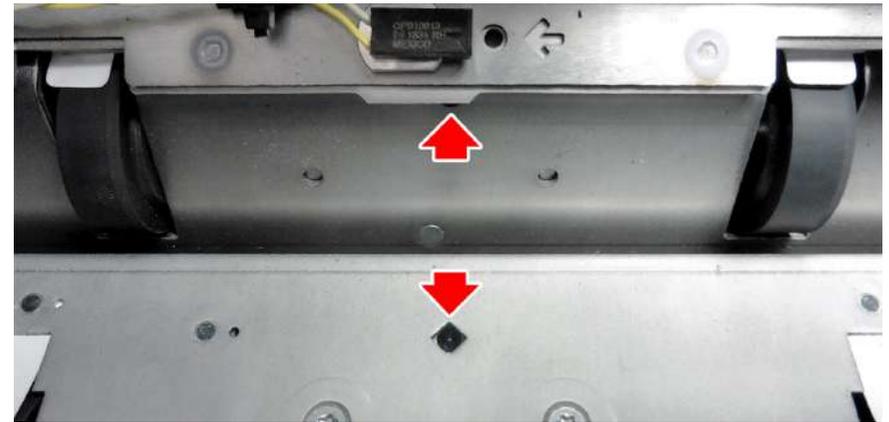
QTL-RND-OPS-00000144-A-00

Figure 6.2 – Envelope feed and deskew sensors

4. Clean the envelope deskew sensor as shown in Figure 6.3 (looking away from the envelope hopper).
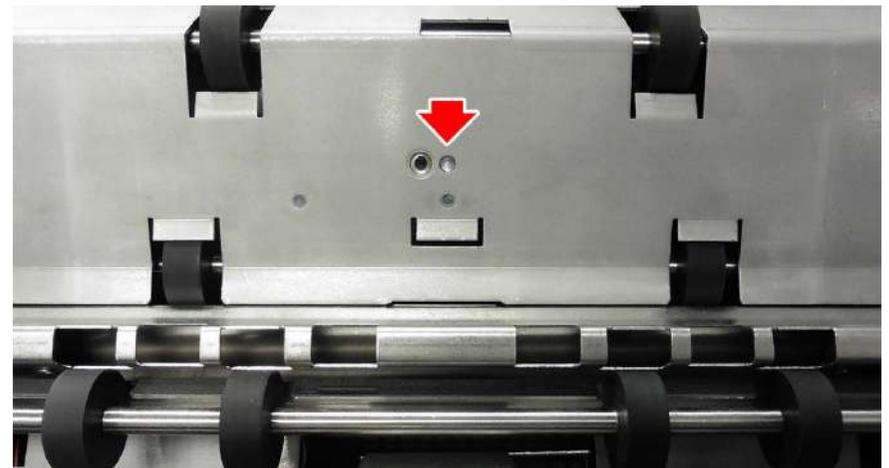
QTL-RND-OPS-00000145-A-00

Figure 6.3 – Envelope deskew sensor

5. Clean the collate pocket and collate entry sensors as shown in Figure 6.4 (looking away from the envelope hopper).
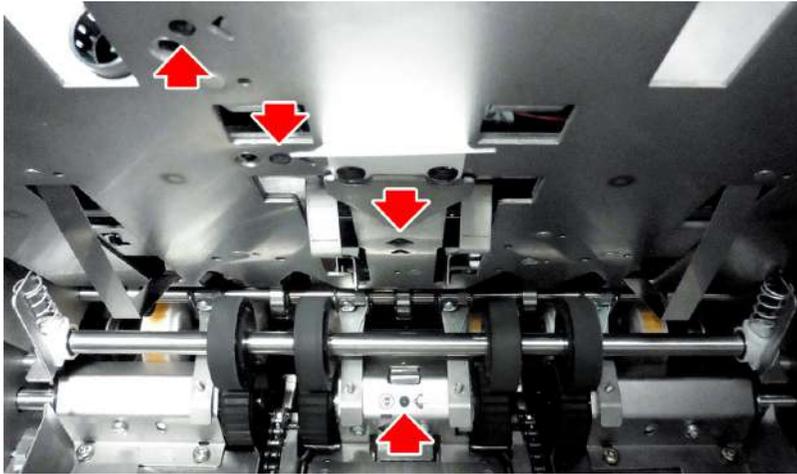
QTL-RND-OPS-00000243-A-00

Figure 6.4 – Collate pocket and collate entry sensors

6. Clean the collate pocket sensors as shown in Figure 6.5 (looking down into the collate pocket area). Then lower the Collate clamshell back down into its original position.
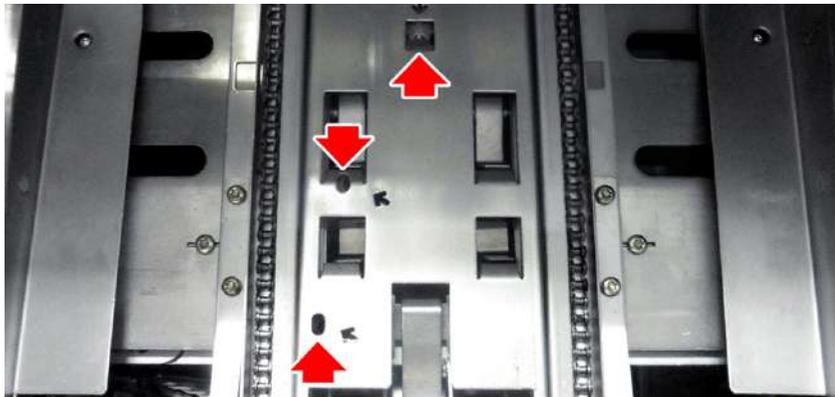
QTL-RND-OPS-00000244-A-00

Figure 6.5 – Collate pocket sensors

7. Lift the Upper conveyor assembly (furthest from the envelope hopper) so it locks into place as shown in Figure 6.6.
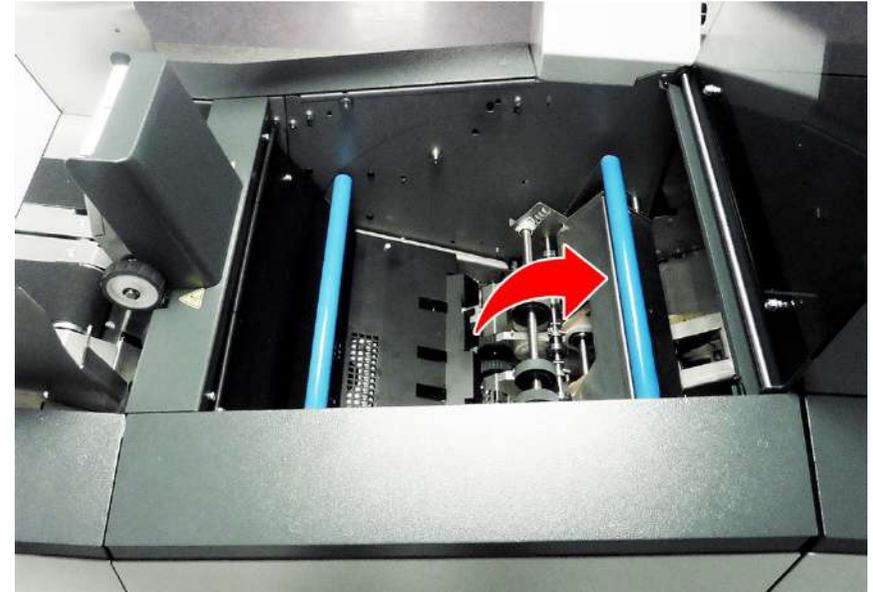
QTL-RND-OPS-00000146-A-00

Figure 6.6 – Raising the Upper conveyor assembly locking it into place

8. Clean the input conveyor sensors as shown in Figure 6.7.
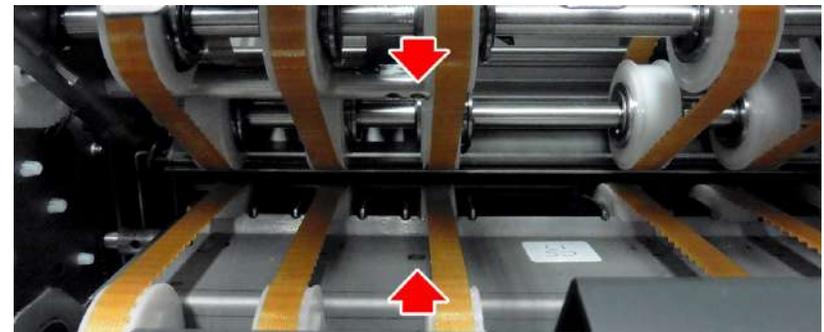
QTL-RND-OPS-00000147-A-00

Figure 6.7 – Input conveyor sensors

9. Lower the side cover, then lift the overguide inside the closer cavity and latch it into place as shown in Figure 6.8.
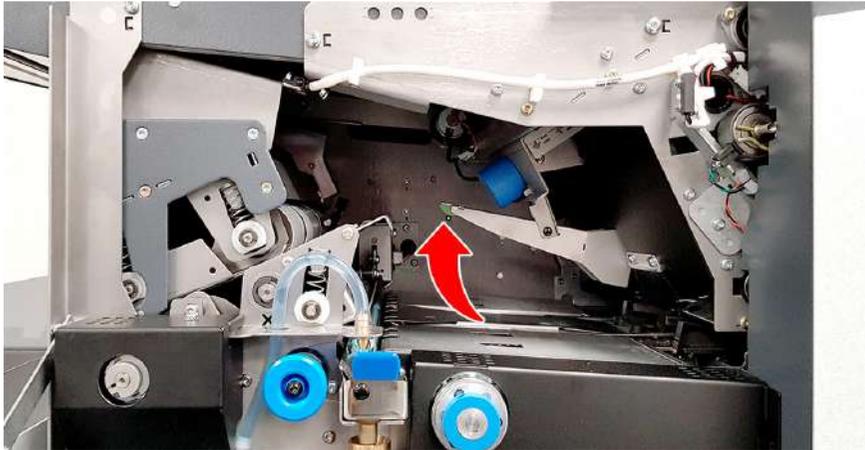
QTL-RND-OPS-00000148-A-00

Figure 6.8 – Raising the overguide latching it into place

10. Clean the insertion area reflective sensors below the overguide as shown in Figure 6.9.
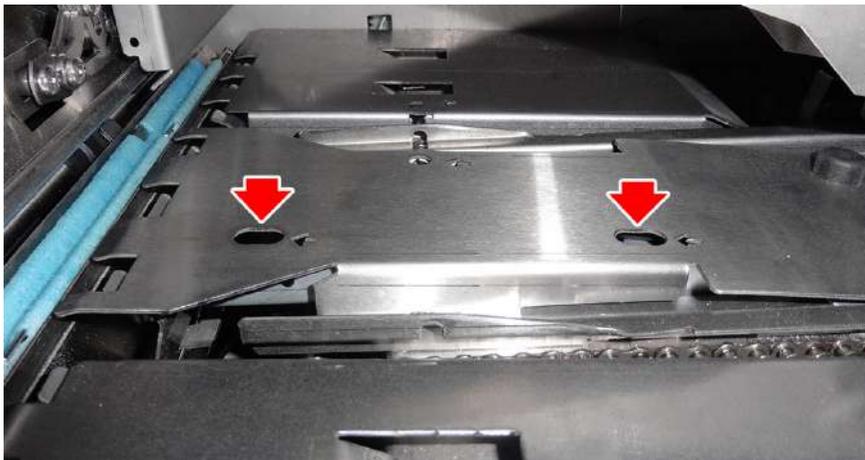
QTL-RND-OPS-00000245-A-00

Figure 6.9 – Insertion area reflective sensors

11. Clean the envelope flap sensors as shown in Figure 6.10.
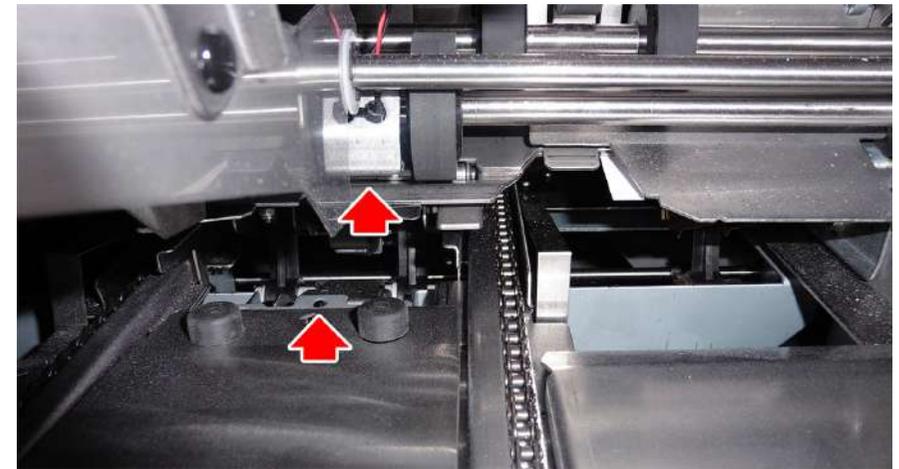
QTL-RND-OPS-00000149-A-00

Figure 6.10 – Envelope flap sensors

12. Clean the envelope hopper reflective sensor as shown in Figure 6.11.

QTL-RND-OPS-00000150-A-00

Figure 6.11 – Envelope hopper reflective sensor

13. Open the side cover, then lower the front output cover below the envelope feeder as shown in Figure 6.12.
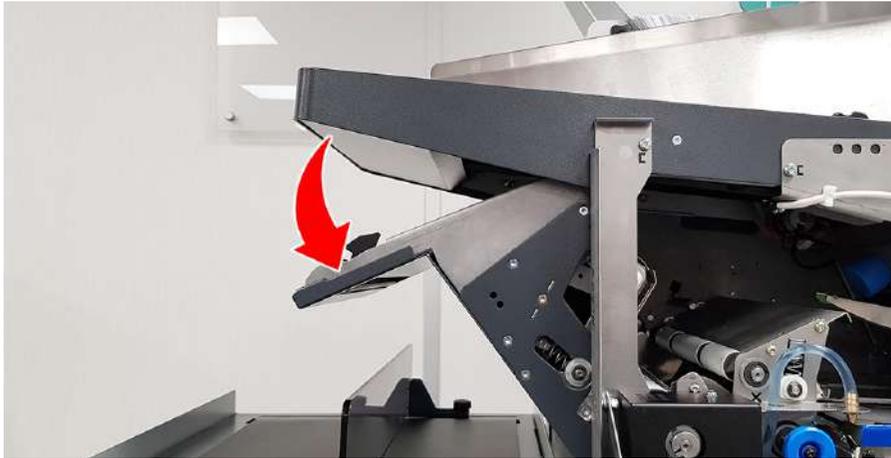
QTL-RND-OPS-00000151-A-00

Figure 6.12 – Lowering the front output cover below the envelope feeder

14. Clean the closer output reflective sensor, wetter output and wetter seal sensors as shown in Figure 6.13.

QTL-RND-OPS-00000152-A-00

Figure 6.13 – Closer output reflective sensor, wetter output and wetter seal sensors

6.1.1.2   Cleaning Versatile Feeder Sensors

1. Raise the Insert Head perspex top cover to access the first installed Versatile Feeder station for sensor cleaning.

2. For subsequent installed feeder stations, open the Versatile Feeder side cover as shown in Figure 6.14 to access from the side for sensor cleaning.
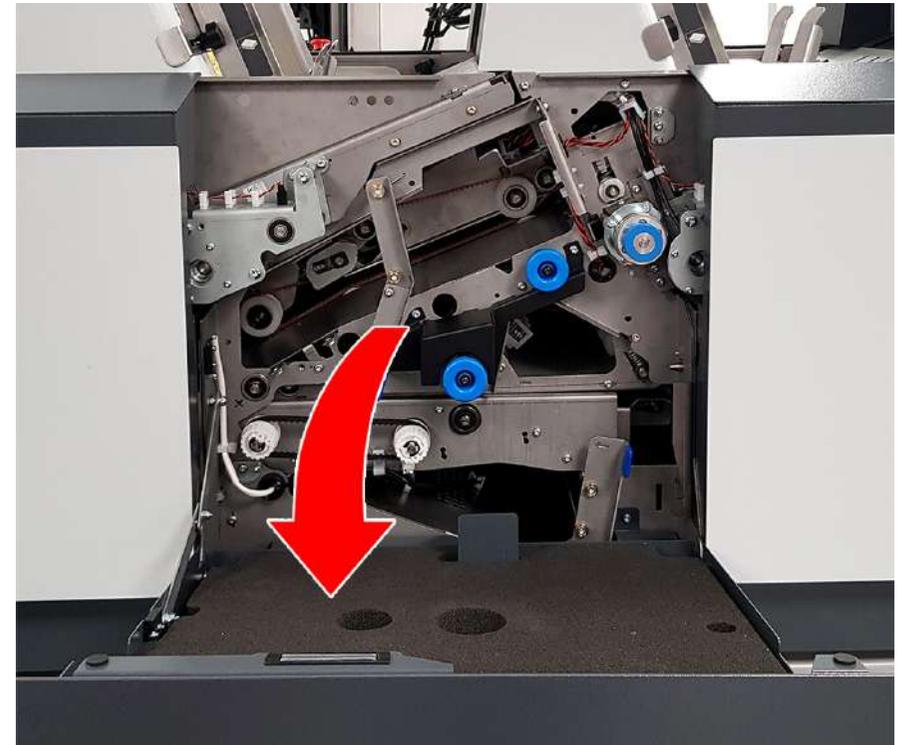
QTL-RND-OPS-00000153-A-00

Figure 6.14 – Opening the Versatile Feeder side cover

3.   Clean the module exit sensors shown in Figure 6.15.
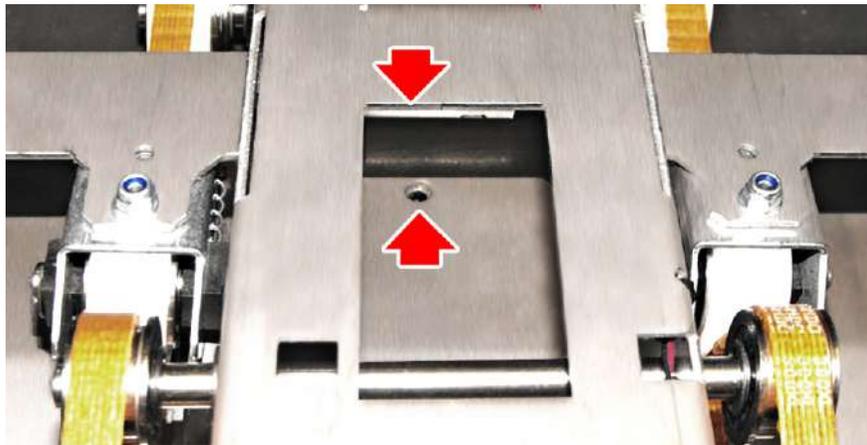
QTL-RND-OPS-00000154-A-00

Figure 6.15 – Module exit sensors

4.   Push the air-duster nozzle approximately 30mm inside the feed hopper shown in Figure 6.16 and spray liberally to clean the sensors.
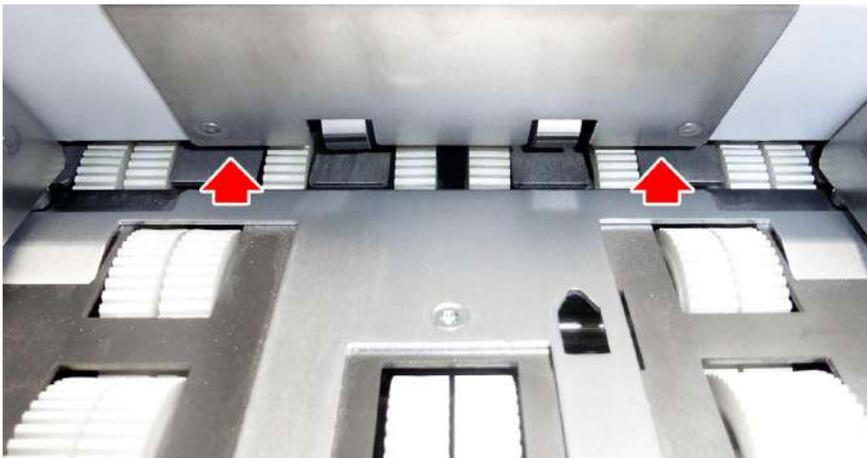
QTL-RND-OPS-00000155-A-00

Figure 6.16 – Feed hopper sensors

5.   Open the side cover and lower the conveyor track assembly as shown in Figure 6.17.
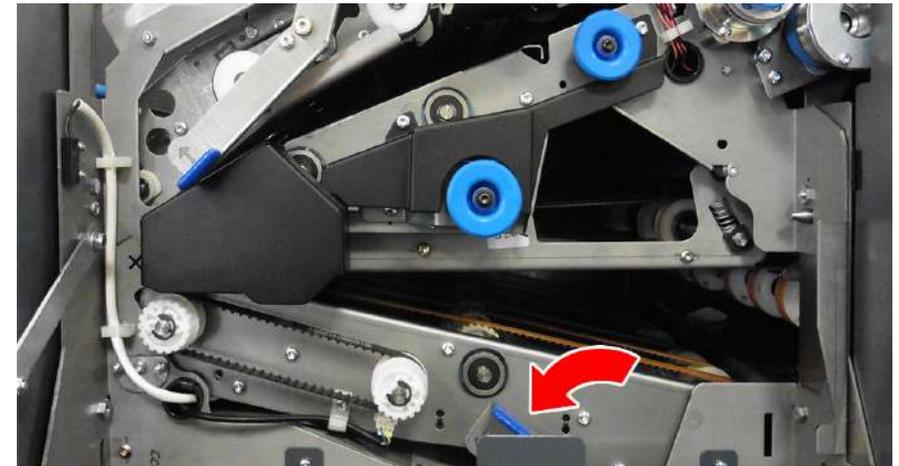
QTL-RND-OPS-00000156-A-00

Figure 6.17 – Lowering the conveyor track assembly

6.   Clean the sensors located in the centre of the track as shown in Figure 6.18.
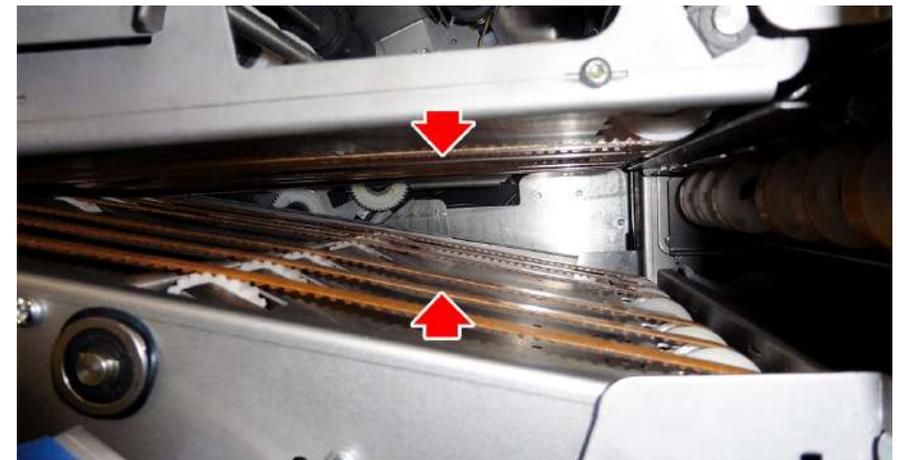
QTL-RND-OPS-00000157-A-00

Figure 6.18 – Track sensors

Mark-reading Versatile Feeders

1. Raise the Insert Head perspex top cover to access the first installed Versatile Feeder (mark-reading) station for sensor cleaning.

2. For subsequent installed feeder (mark-reading) stations, these sensors can only be accessed after dismantling by a manufacturer trained certified Engineer.

3. Once dismantled, clean the mark-reading sensors shown in Figure 6.19.
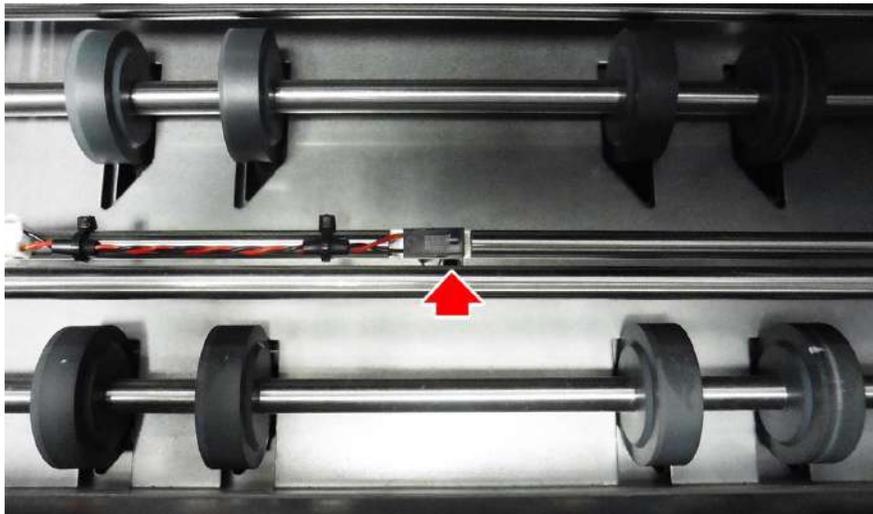
QTL-RND-OPS-00000158-A-00

Figure 6.19 – Mark-reading Versatile Feeder sensors

6.1.1.3   Cleaning Feeder Folder Sensors

1. Raise the top cover of the Feeder Folder as shown in Figure 6.20.
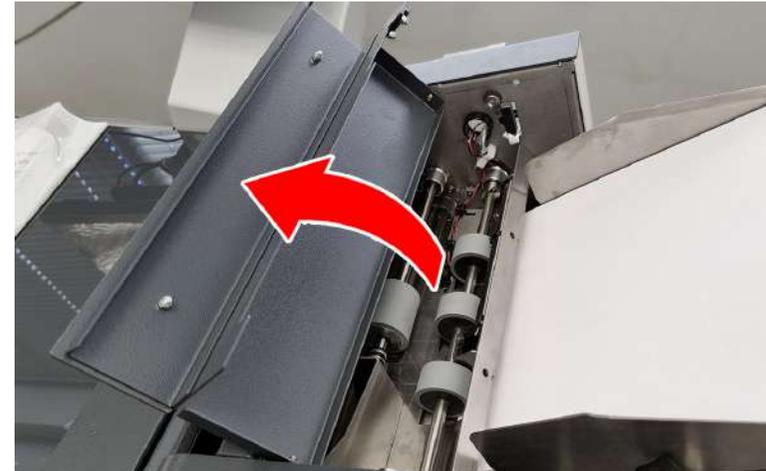
QTL-RND-OPS-00000455-A-00

Figure 6.20 – Raising the Feeder Folder top cover

2. Direct the air-duster into the hopper feed gap to clean the pre-feed, doubles, and deskew sensors as shown in Figure 6.21.
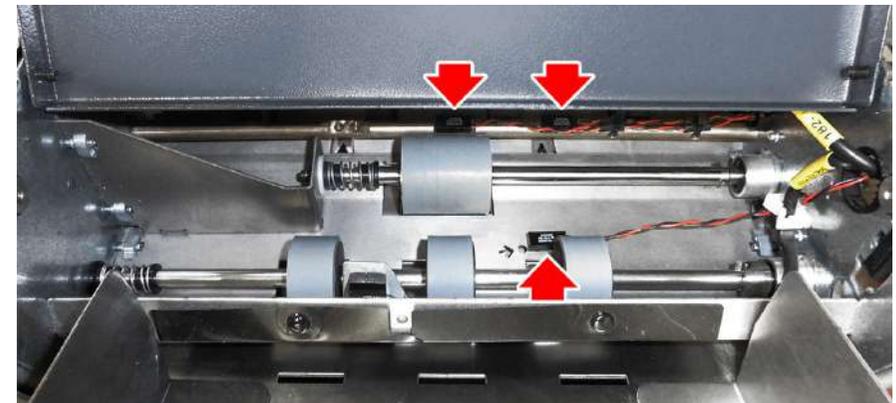
QTL-RND-OPS-00000250-A-00

Figure 6.21 – Pre-feed, doubles, and deskew sensors

3. Ensure the top cover is lowered back into its original position once finished.

4. Open the Feeder Folder operator side cover as shown in Figure 6.22, to access the track sensors and transport exit sensors for cleaning.
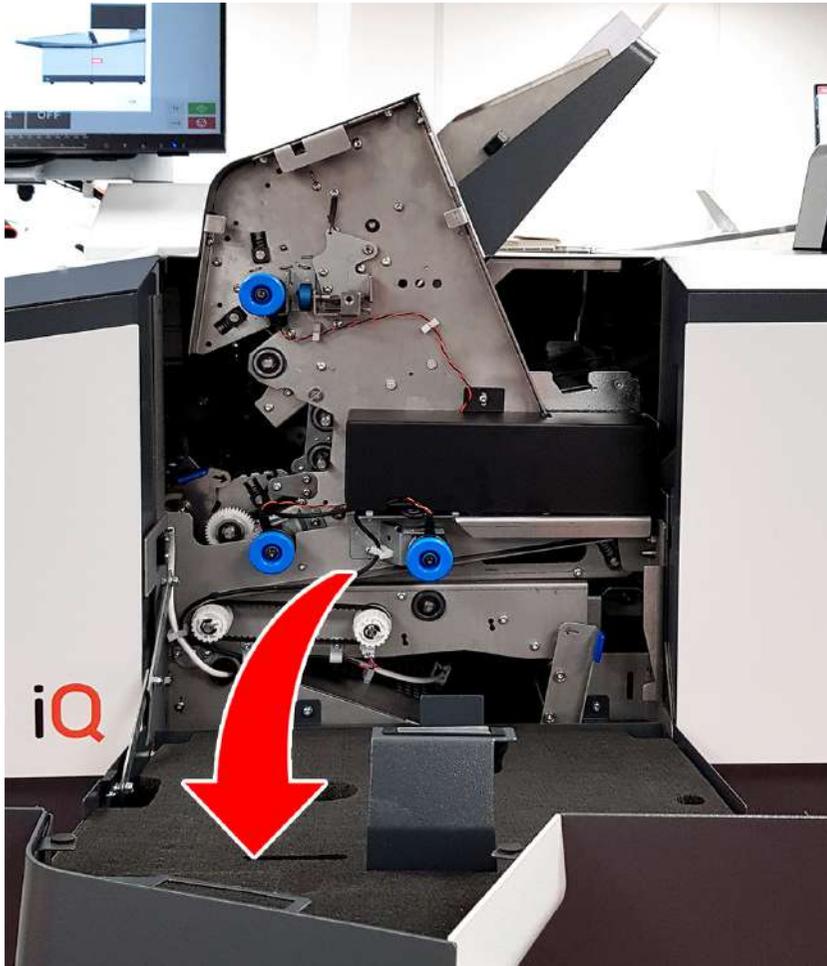
QTL-RND-OPS-00000450-A-00

Figure 6.22 – Opening the Feeder Folder operator side cover

5. Release the latch of the transport assembly and lift it upwards as shown in Figure 6.23, to access the transport exit sensors.
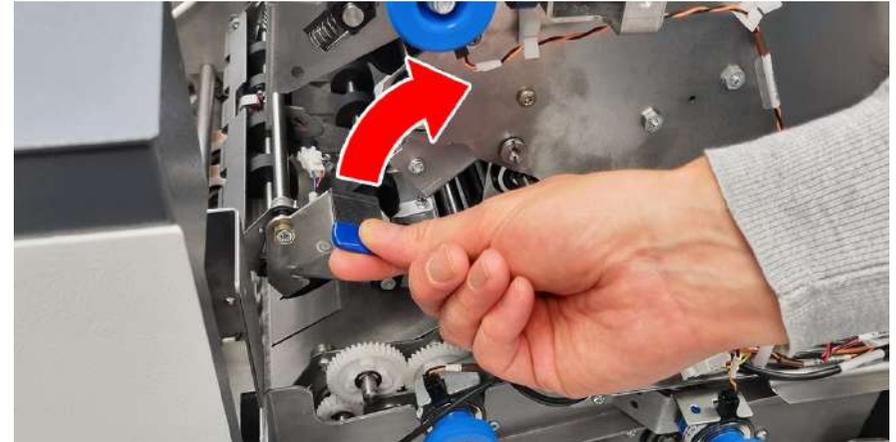
QTL-RND-OPS-00000457-A-00

Figure 6.23 – Lifting the transport assembly

6. Direct the air-duster into the cutouts as indicated in Figure 6.24 to clean the transport exit sensors.
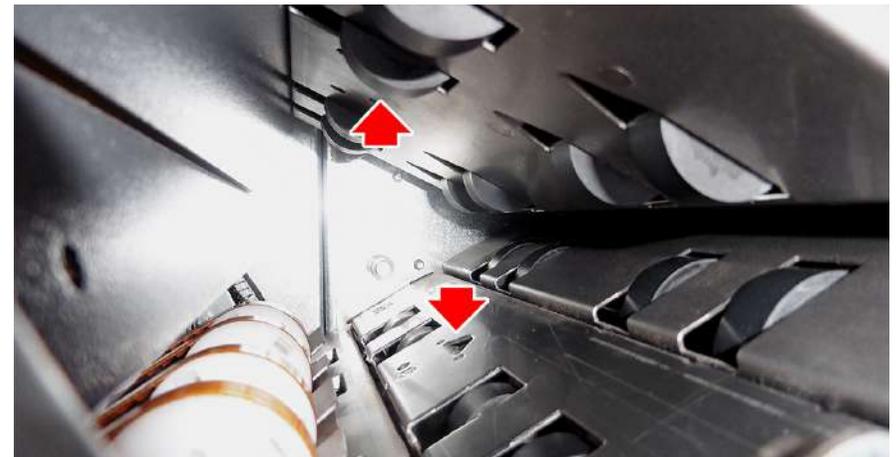
QTL-RND-OPS-00000252-A-00

Figure 6.24 – Transport exit sensors

7. Push the lowermost lever forward to lower the conveyor track assembly as shown in Figure 6.25, to access the track sensors.
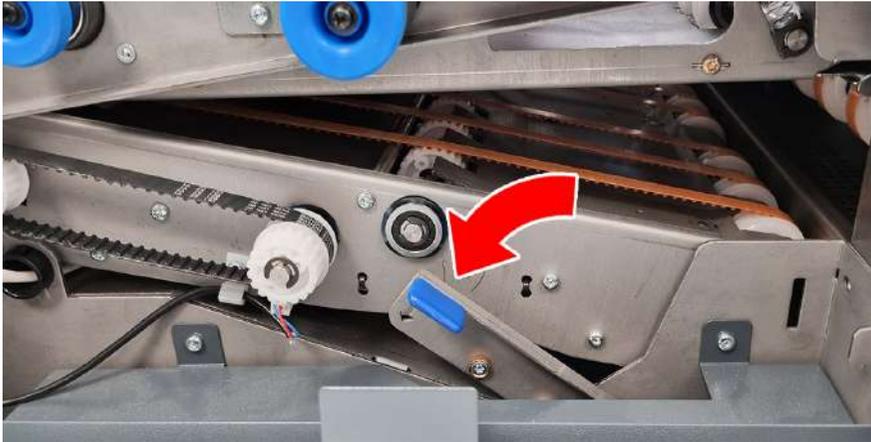
QTL-RND-OPS-00000458-A-00

Figure 6.25 – Lowering the conveyor track assembly

8. Clean the track sensors located next to the gearwheel in the centre of the track, with the upper half directly above it as shown in Figure 6.26.
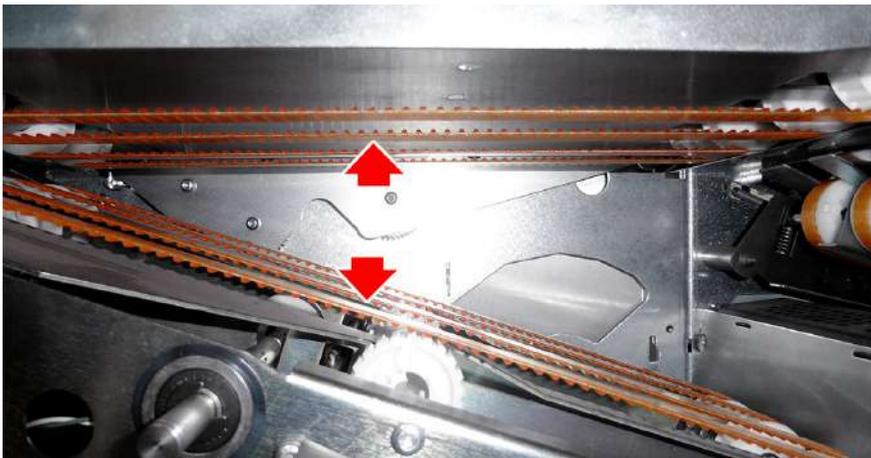
QTL-RND-OPS-00000248-A-00

Figure 6.26 – Track sensors

Feeder Folder CIS Cleaning

1. To access the CIS for cleaning, first remove the hopper tray, lifting it up and outwards as shown in Figure 6.27.

QTL-RND-OPS-00000454-A-00

Figure 6.27 – Removing the Feeder Folder hopper tray

2.   The fold plate assembly will then need to be removed by first lifting the blue handle upwards to release the fold box as shown in Figure 6.28.

QTL-RND-OPS-00000459-A-00

Figure 6.28 – Releasing the fold plate assembly

3.   Once released, gently lift out and remove the fold plate assembly as shown in Figure 6.29.

QTL-RND-OPS-00000460-A-00

Figure 6.29 – Removing the fold plate assembly

4.   Pull out and remove the infeed plate as shown in Figure 6.30.
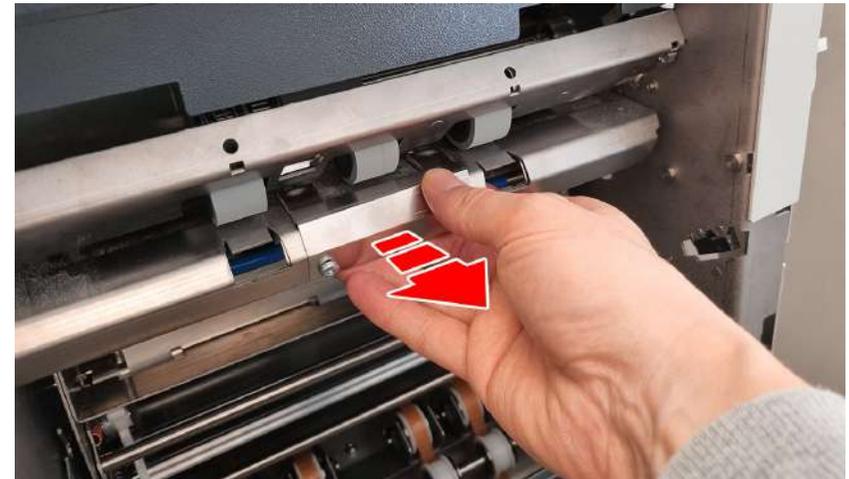
QTL-RND-OPS-00000461-A-00

Figure 6.30 – Removing the infeed plate

5.   Using the blue handle, lower the transport roller assembly as shown in Figure 6.31.

QTL-RND-OPS-00000462-A-00

Figure 6.31 – Lowering the transport roller assembly

6. Direct the air-duster into the cutouts indicated to clean the CIS entry sensor, and the CIS reader itself as shown in Figure 6.32.
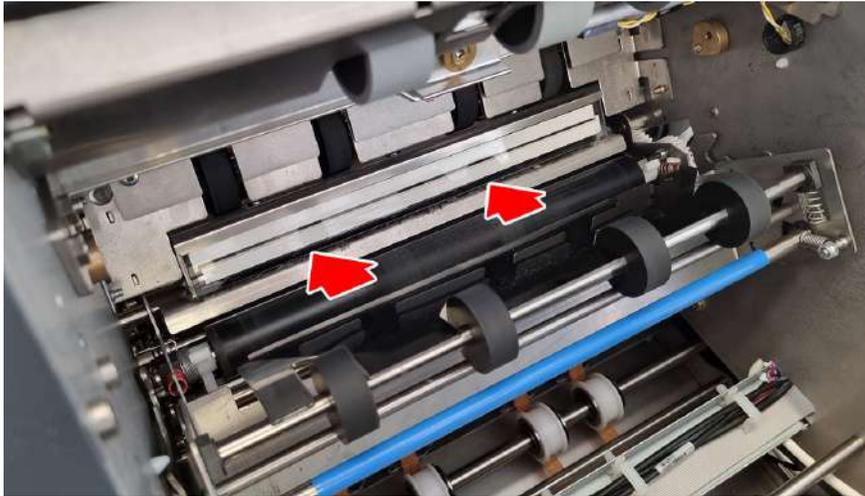
QTL-RND-OPS-00000463-A-00

Figure 6.32 – CIS reader and CIS entry sensor

7. Once complete, ensure all assemblies have been re-fitted correctly following the previous steps given in reverse order.

6.1.1.4   Cleaning Tower Folder Sensors

1. Open the Tower Folder operator side cover as shown in Figure 6.33 to access the sensors for cleaning.
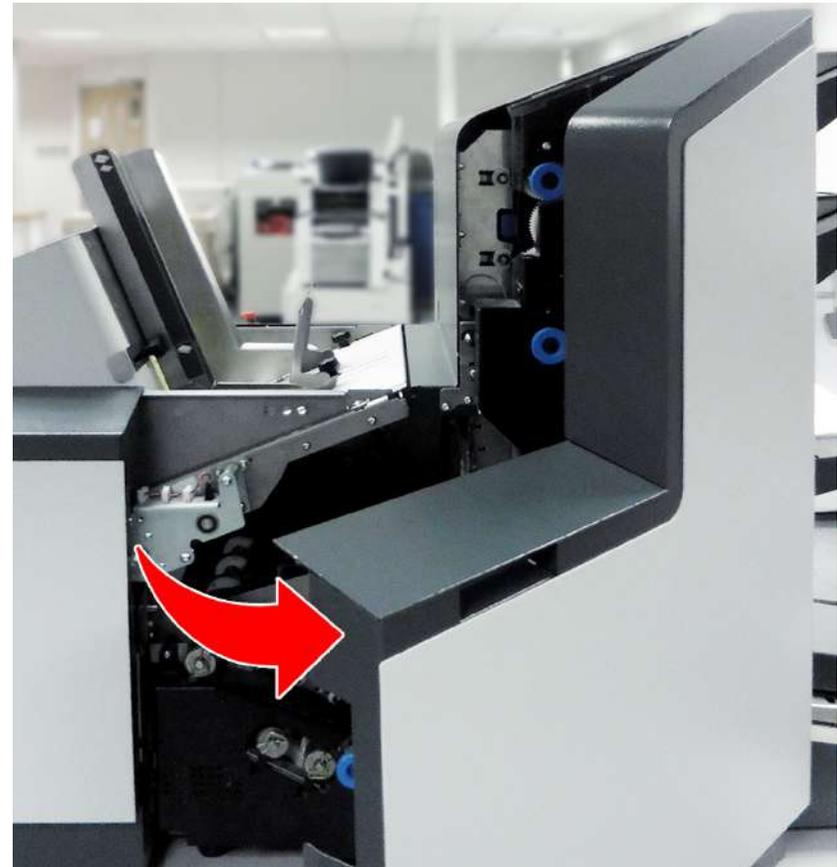
QTL-RND-OPS-00000125-A-00

Figure 6.33 – Opening the Tower Folder operator side cover

2. Open the Tower Folder top cover as shown in Figure 6.34 to access the sensors for cleaning.

QTL-RND-OPS-00000159-A-00

Figure 6.34 – Opening the Tower Folder top cover

3. Insert the air-duster into the hopper feed gap to clean the hopper load sensor as shown in Figure 6.35.
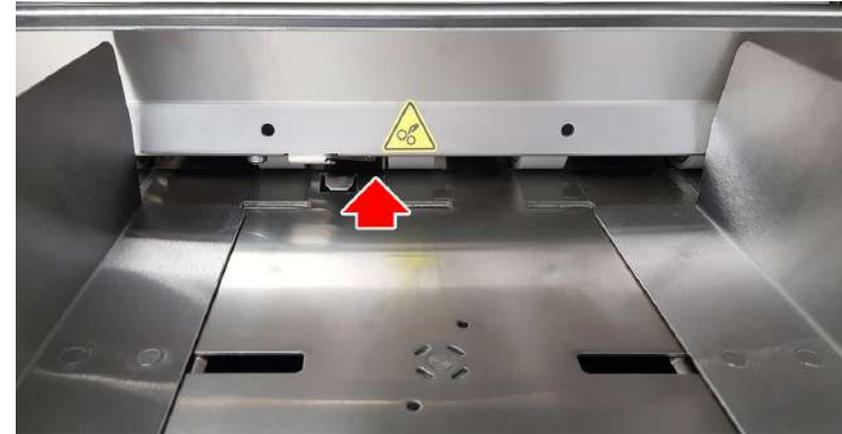
QTL-RND-OPS-00000475-A-00

Figure 6.35 – Hopper load sensor

4. Insert the air-duster under the chassis bridges to clean the pre-feed, deskew, and vertical path tracking sensors shown in Figure 6.36.
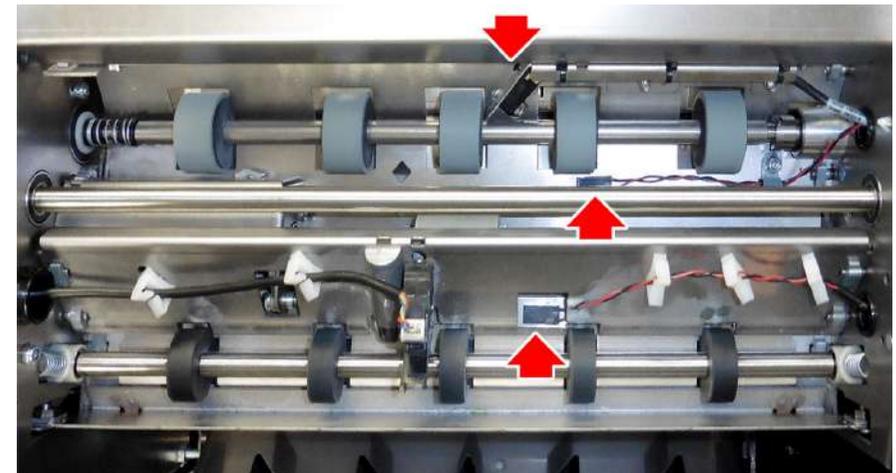
QTL-RND-OPS-00000160-A-00

Figure 6.36 – Pre-feed, deskew, and vertical path tracking sensors

> ! Transport assemblies labelled 1, 2, 3, 4 and 5 as shown in Figure 6.37 will need to be raised individually and sequentially to access and clean the various sensors within the base unit and tower unit.
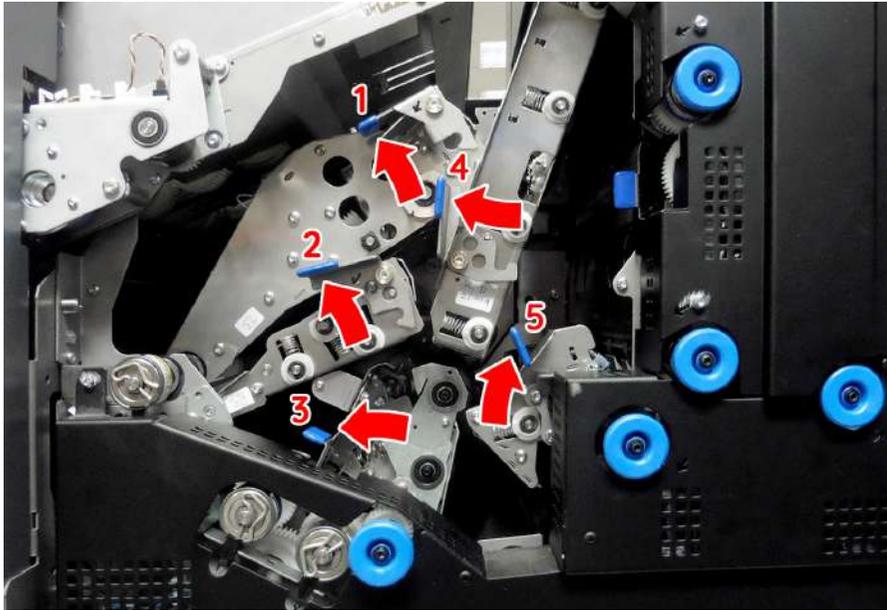
QTL-RND-OPS-00000476-A-00

Figure 6.37 – Base unit transport assemblies No.1, No.2, and No.3

5. Raise and latch the transport assembly No.1 by pushing the blue lever upwards indicated in Figure 6.37.

6. Clean the module exit sensor as shown in Figure 6.38.
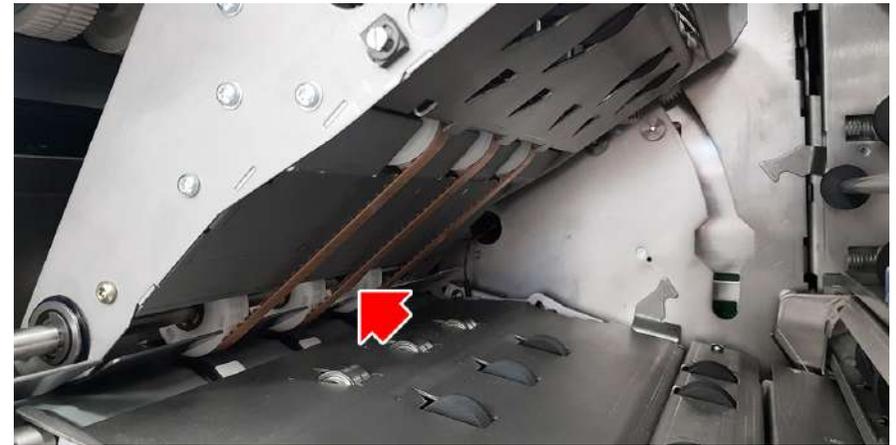
QTL-RND-OPS-00000477-A-00

Figure 6.38 – Module exit sensor

7. Raise and latch the transport assembly No.2 by pushing the blue lever upwards indicated in Figure 6.37.

8. Clean the folder exit sensor as shown in Figure 6.39.
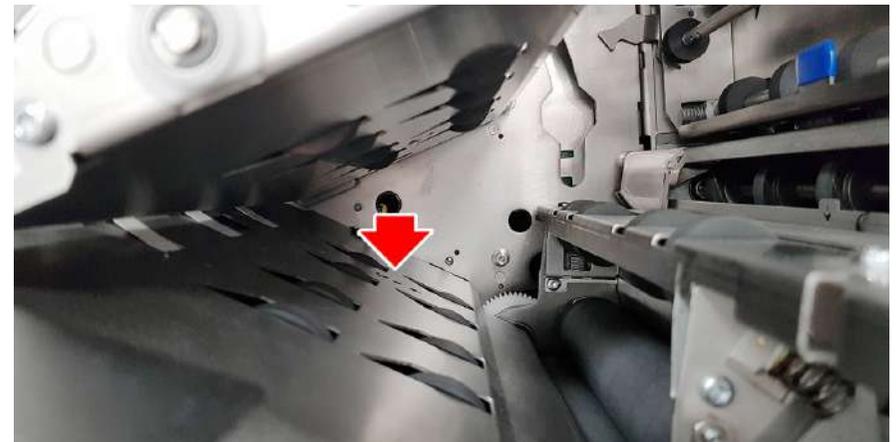
QTL-RND-OPS-00000478-A-00

Figure 6.39 – Folder exit sensor

9. Raise and latch the transport assembly No.3, 4, and 5 by pushing the blue lever upwards indicated in Figure 6.37.

10. Clean the folder entry and folder bypass sensors as shown in Figure 6.40.

QTL-RND-OPS-00000479-A-00

Figure 6.40 – Folder entry and folder bypass sensor

Tower Folder CIS Cleaning

1. To access the upper tower unit CIS for cleaning, open the Tower Folder top cover.

2. Clean the upper tower unit CIS as shown in Figure 6.41.

QTL-RND-OPS-00000480-A-00

Figure 6.41 – Upper tower unit CIS

3. To access the lower tower unit CIS for cleaning, ensure all transport assemblies shown in Figure 6.37 have been raised and latched.

4. Clean the lower tower unit CIS as shown in Figure 6.42.

QTL-RND-OPS-00000481-A-00

Figure 6.42 – Lower tower unit CIS

5. Ensure all transport assemblies have been returned to their original positions once cleaning is complete.

6.1.1.5   Cleaning Output Sorter Sensors

The Output Sorter is fitted with three sensors located in the positions shown in Figure 6.43.
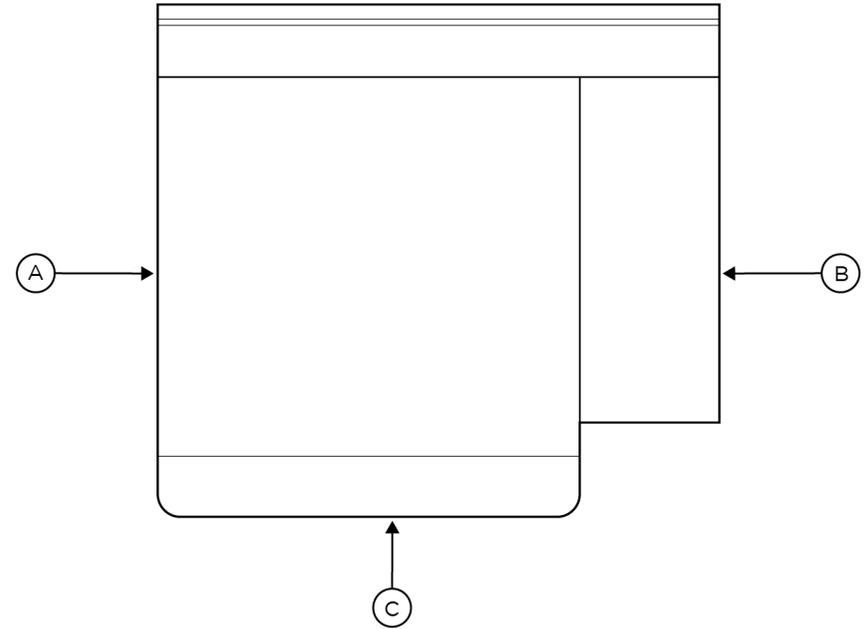
QTL-RND-GEN-00000092-A-00

Figure 6.43 – Output Sorter sensor locations

A. Output sensor

B. Input Sensor

C. Divert Sensor

1. Raise the Output Sorter top cover as shown in Figure 6.44 to access the sensors for cleaning.
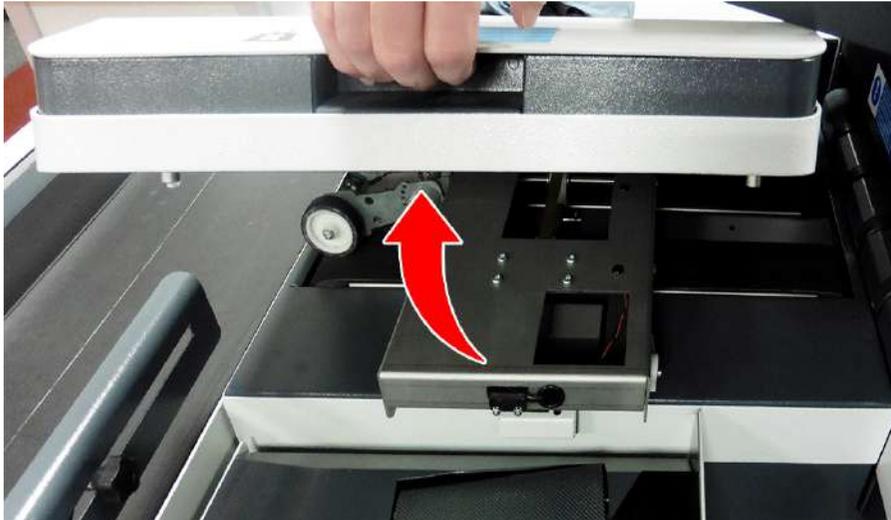
QTL-RND-OPS-00000161-A-00

Figure 6.44 – Raising the Output Sorter top cover

2. Clean the input sensor shown in Figure 6.45.

QTL-RND-OPS-00000162-A-00

Figure 6.45 – Input sensor

3. Clean the output sensor shown in Figure 6.46.
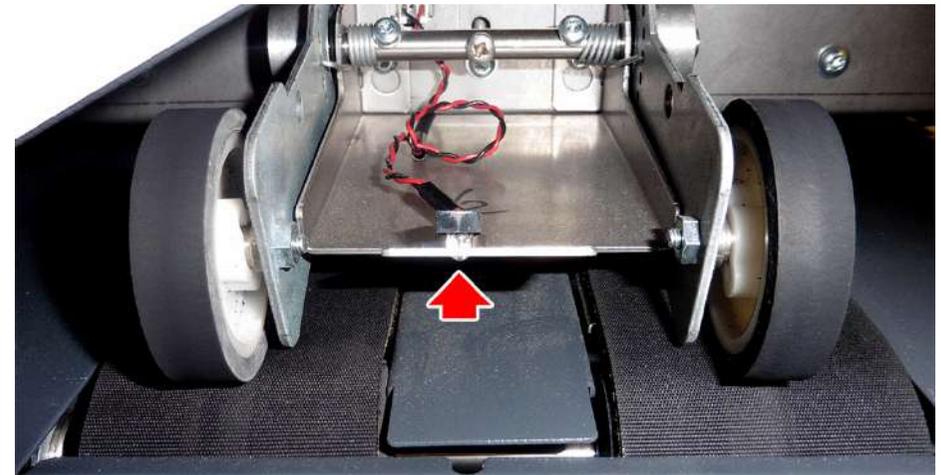
QTL-RND-OPS-00000163-A-00

Figure 6.46 – Output sensor

4. Clean the divert sensor shown in Figure 6.47.
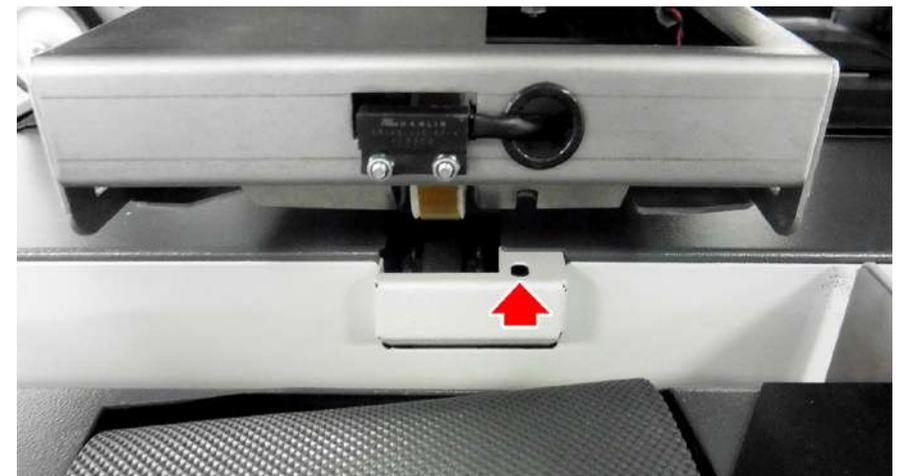
QTL-RND-OPS-00000164-A-00

Figure 6.47 – Divert sensor

6.1.1.6   Cleaning Turner Sensors

The Turner is fitted with two sensors, one located on the output side of the turn column, the other is located on the output edge just before the Franker.

1.   Clean the turn column rotate sensor shown in Figure 6.48.

QTL-RND-OPS-00000165-A-00

Figure 6.48 – Turn column rotate sensor

2.   Clean the output sensor shown in Figure 6.49.

QTL-RND-OPS-00000166-A-00

Figure 6.49 – Turner output sensor

6.1.2   Cleaning Conveyor Belts

Accumulated dirt, grime and residue may build up on the surface of the Output Conveyor, Output Sorter and Turner conveyor belts, specifically after a long period of use.

Periodic cleaning on the complete surface of the conveyor belts may be required.

To clean the belts, use a lint-free cloth dampened with water. This method will normally be sufficient, however for more stubborn soiling, the use of a foam-type surface cleaner may help.

> **!** Avoid using strong spirit-based cleaners or solvents, as these may damage the belts.

6.1.3   Cleaning Rollers

All rollers and feed wheels should be cleaned periodically to remove any residue picked up from processing printed material.

To clean the rollers and feed wheels, use a lint-free cloth dampened with water. This method will normally be sufficient, however for more stubborn soiling, the use of a foam-type surface cleaner may help.

Clean the full width and circumference of all visible rollers and feed wheels.

Note:

Most rollers and feed wheels may be turned by hand, though some may be quite rigid.

> **!** Avoid using strong spirit-based cleaners or solvents, as these may damage the rollers and feed wheels.

6.2   Clearing Paper Jams

Paper jams may occur periodically during a run cycle, however if a paper jam does occur, the area affected is typically indicated in the on-screen error message within IMOS.

To clear any paper jams, always follow the IMOS on-screen instructions, and the correct procedures set out below for the relating unit affected only.

6.2.1   Insert Head Paper Jams

1.   Open the Insert Head side cover (operator side) and lower the front sealer cover as shown in Figure 6.50.
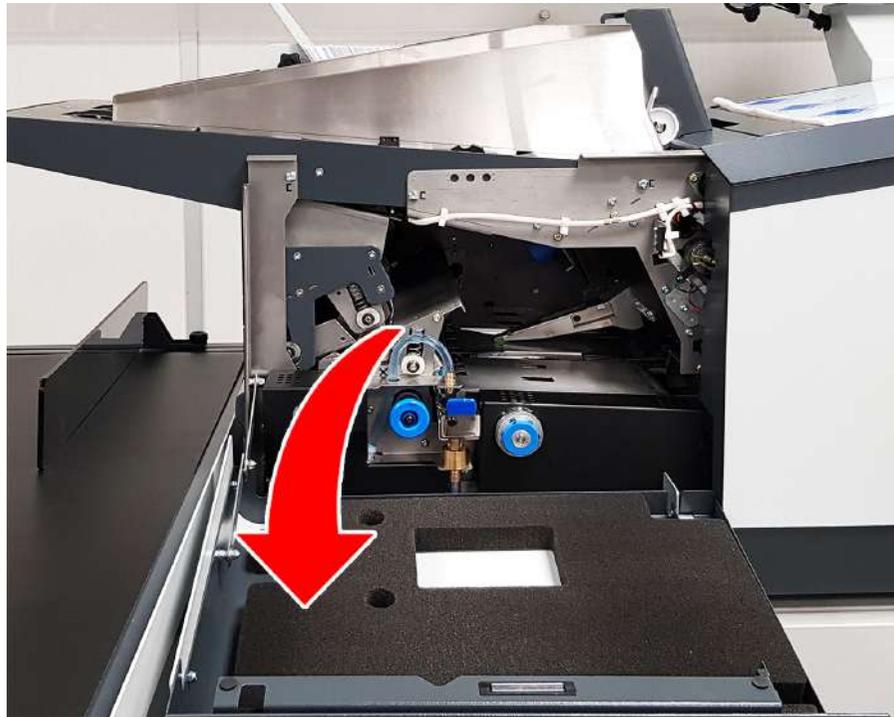
QTL-RND-OPS-00000167-A-00

Figure 6.50 – Lowering the front sealer cover

2.   If the jammed paper is not fully visible, turn the blue knobs clockwise or anti-clockwise as shown in Figure 6.51 to wind it into view.
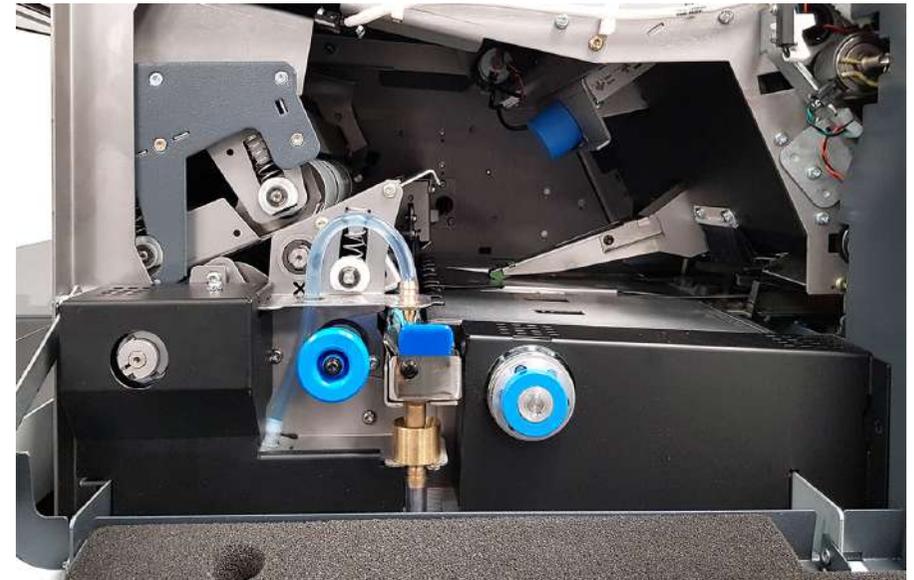
QTL-RND-OPS-00000168-A-00

Figure 6.51 – Turning the blue knobs to access the jammed paper

3.   Carefully pull the jammed paper out, and return the covers to their original position.

6.2.1.1   Collate Pocket Paper Jams

1. Raise the Insert Head perspex top cover to access the collate clam.

2. Lift the collate clam (closest to envelope hopper) so it locks into place as shown in Figure 6.52.
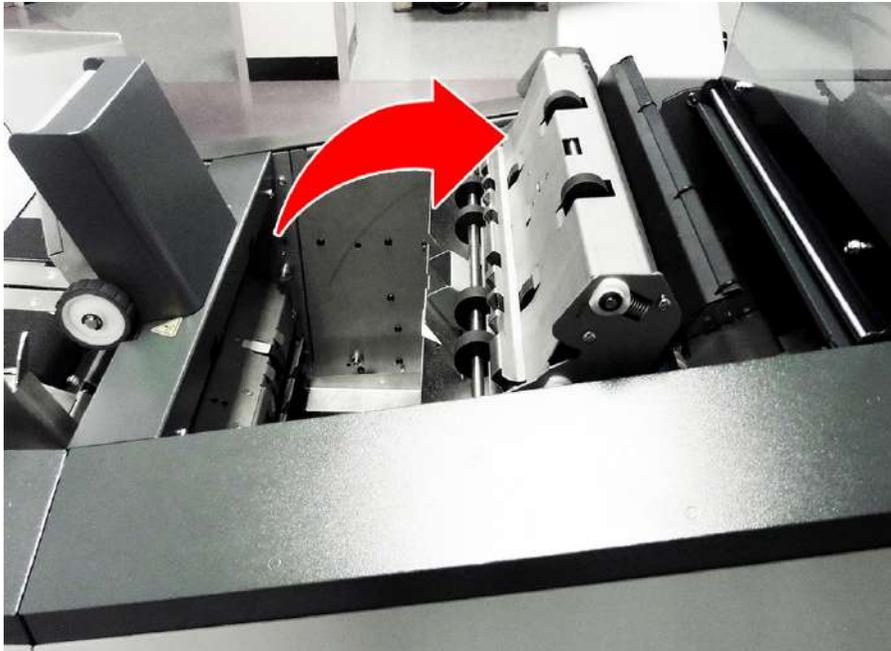
QTL-RND-OPS-00000143-A-00

Figure 6.52 – Lifting the collate clam locking it into place

3. Carefully pull the jammed paper out inside the collate pocket area, and lower the Collate clamshell and Insert Head perspex top cover back down into its original position.

> ⚠️ Ensure only the jammed paper inside the collate pocket area is removed. Removing the subsequent document being processed will result in an IMOS "**document has failed to arrive**" error.

6.2.2   Versatile Feeder Paper Jams

1. Open the Versatile Feeder side cover.

2. Push the levers indicated in Figure 6.53 to access the jammed paper.
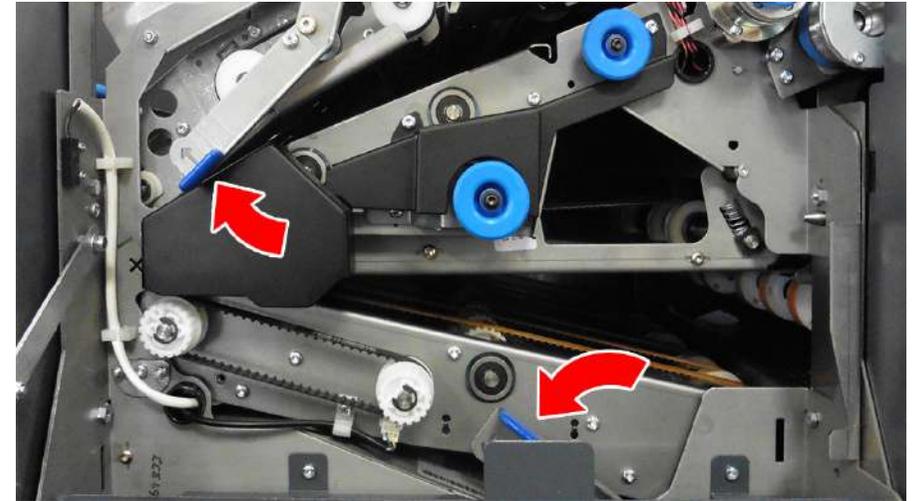
QTL-RND-OPS-00000171-A-00

Figure 6.53 – Pushing the levers to access the jammed paper

3. If the jammed paper is not fully visible, turn the blue knobs clockwise or anti-clockwise to wind it into view.

4. Carefully pull the jammed paper out, and close the Versatile Feeder side cover once complete.

6.2.3   Feeder Folder Paper Jams

1. Open the Feeder Folder operator side cover.

2. Push the levers inwards as shown in Figure 6.54 to access the jammed paper.
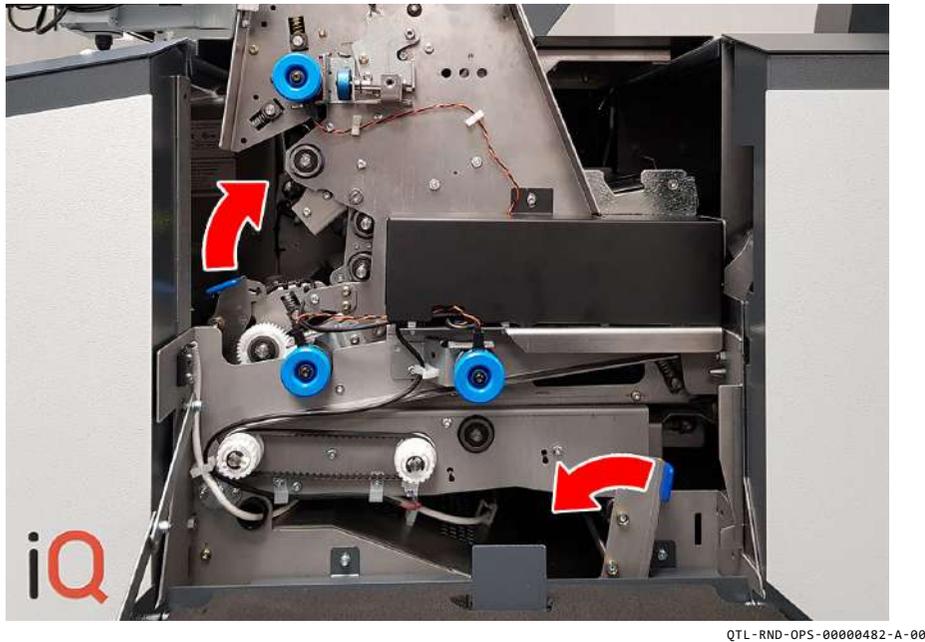
QTL-RND-OPS-00000482-A-00

Figure 6.54 – Pushing the levers to access the jammed paper

3. If the jammed paper is not fully visible, turn the blue knobs clockwise or anti-clockwise to wind it into view.

4. Carefully pull the jammed paper out, and close the Feeder operator side cover once complete.

6.2.4   Tower Folder Paper Jams

To clear any paper jams in Tower Folder base or tower units, first open the Tower Folder operator side cover as shown in Figure 6.55.
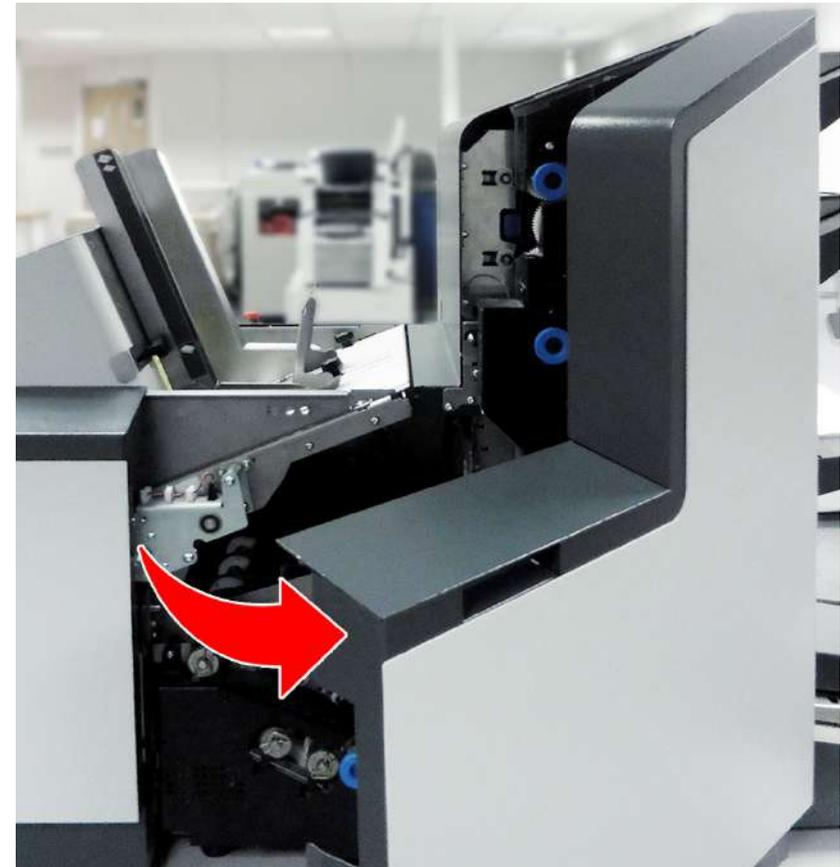
QTL-RND-OPS-00000125-A-00

Figure 6.55 – Opening the Tower Folder operator side cover

6.2.4.1 Base Unit Paper Jams

1. Raise and latch the transport assemblies No.1, No.2, and No.3, by pushing the levers indicated in Figure 6.56.
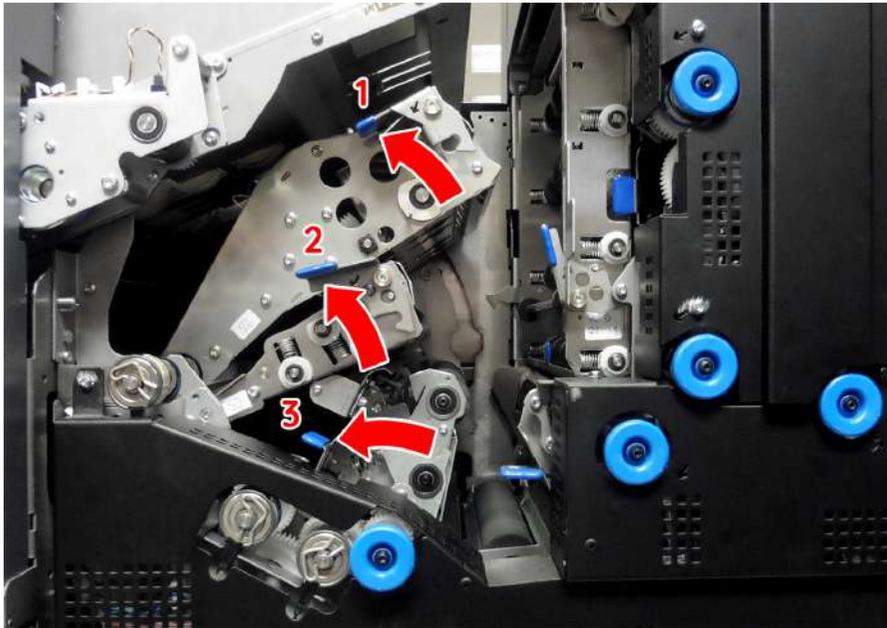
QTL-RND-OPS-00000172-A-00

Figure 6.56 – Raise and latching transport assemblies No.1, No.2, and No.3

2. If the jammed paper is not fully visible, turn the blue knobs clockwise or anti-clockwise to wind it into view.

3. Carefully pull the jammed paper out, and lower the transport assemblies back into their original position.

4. Close the Tower Folder operator side cover once complete.

6.2.4.2 Tower Unit Paper Jams

1. Raise and latch transport assembly No.4, and raise the roller assembly No.5 below it as shown in Figure 6.57.
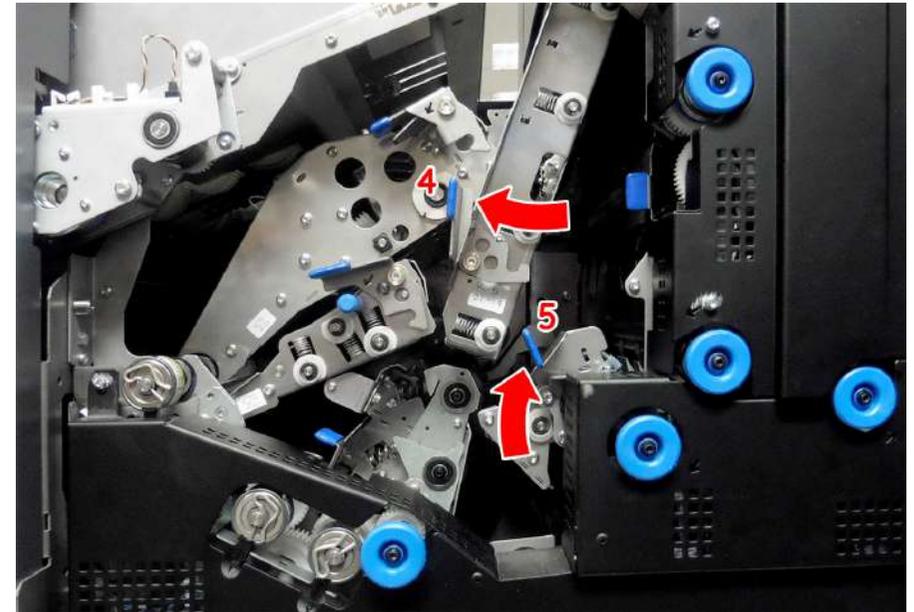
QTL-RND-OPS-00000173-A-00

Figure 6.57 – Raise and latching transport assembly No.4, and roller assembly No.5

2. If the jammed paper is not fully visible, turn the blue knobs clockwise or anti-clockwise to wind it into view.

3. Carefully pull the jammed paper out, and lower the transport assembly and roller assembly back into their original position.

4. Close the Tower Folder operator side cover once complete.

6.2.4.3   Accumulator Paper Jams

1.   To remove accumulator paper jams, raise the accumulator overguide until it locks up into place as shown in Figure 6.58.

QTL-RND-OPS-00000124-A-00

Figure 6.58 – Raising the Accumulator overguide

2.   Remove the jammed paper.

3.   Once complete, press the lock latch inwards to release the overguide and return it into position.

6.3   Changing Feed Tyres and Pickup Rollers

If feed rollers become worn, or when changing between jobs with different document types (e.g. glossy material), it may be necessary to replace or change them to assist feeding.

Feed tyres are fitted by following the procedures set out.

All replaceable rollers may be replaced or changed in a similar way as follows:

6.3.1   Insert Head Feed Tyres and Pickup Rollers

1.   To replace the Insert Head feed tyres on the envelope tractor assembly, simply slip off the tyres as shown in Figure 6.59 and replace as required.
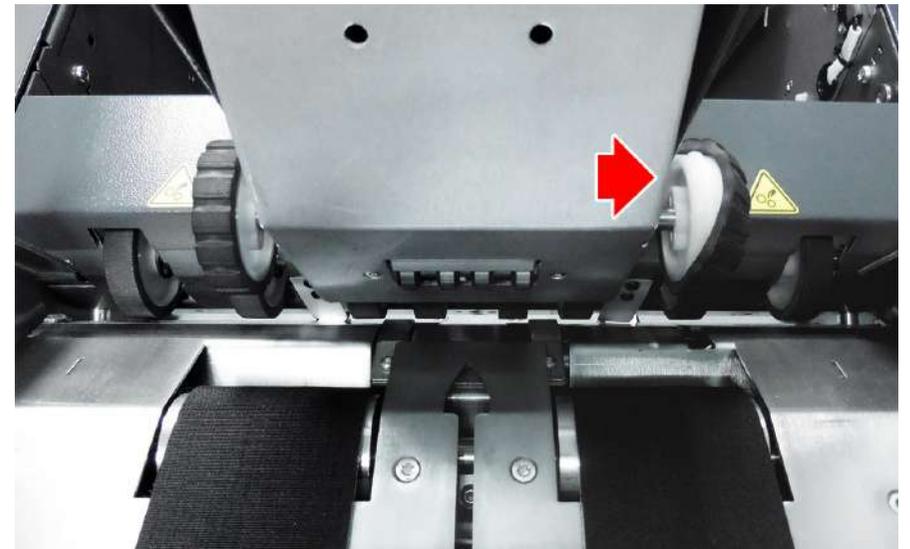
QTL-RND-OPS-00000262-A-00

Figure 6.59 – Replacing the envelope tractor feed tyres

2. To access the Insert Head feed pickup roller for replacement, first raise the Insert Head perspex top cover, and lift the collate clam (closest to envelope hopper) so it locks into place as shown in Figure 6.60.
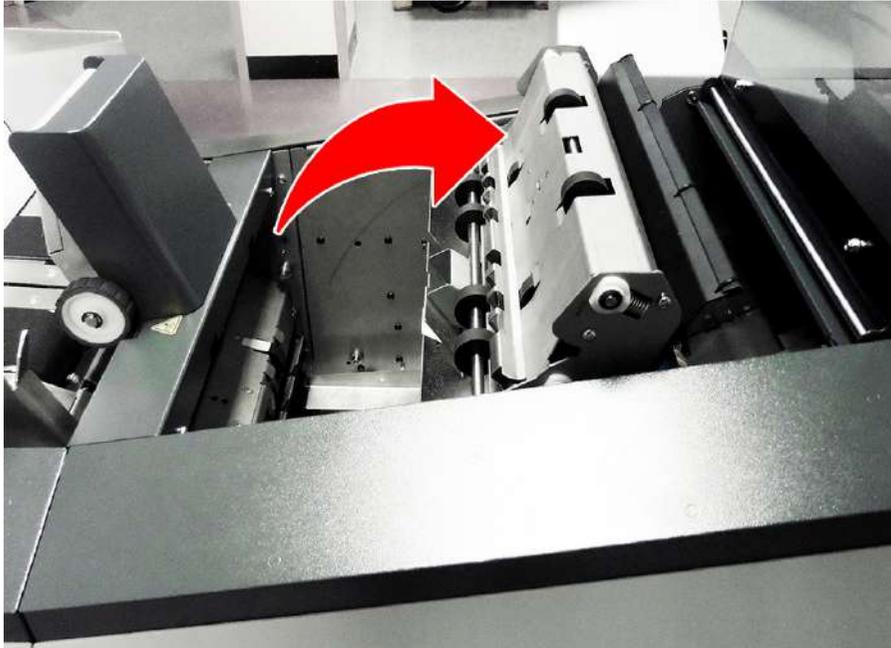
QTL-RND-OPS-00000143-A-00

Figure 6.60 – Lifting the collate clam locking it into place

3. The feed pickup roller can the then be accessed under the envelope tractor assembly as shown in Figure 6.61.
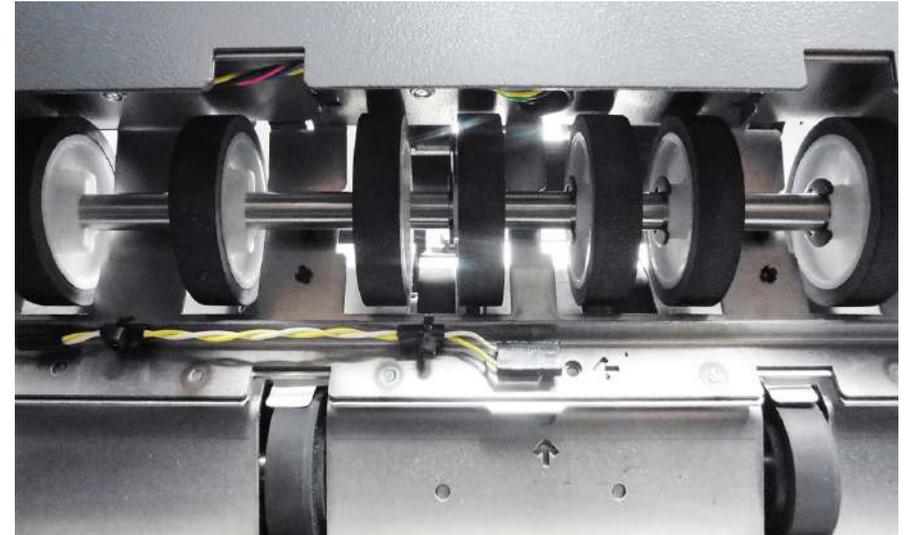
QTL-RND-OPS-00000263-A-00

Figure 6.61 – Accessing the Insert Head feed pickup roller

4. Slide the spring loaded collar of the pickup roller assembly inwards to release the drive dog as shown in Figure 6.62.
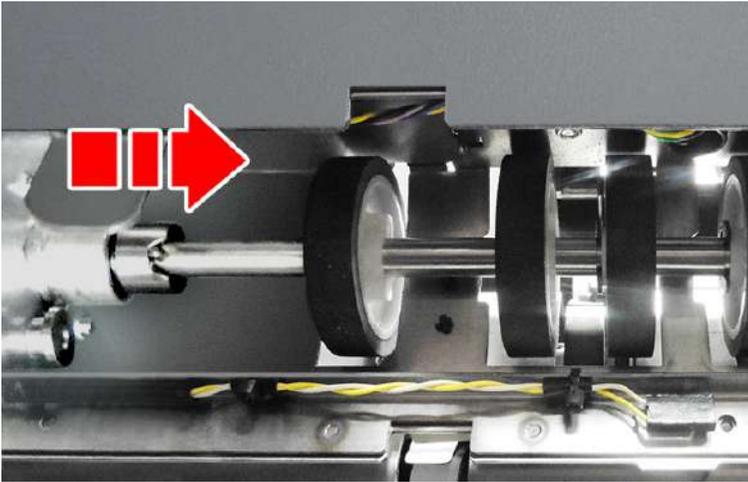
QTL-RND-OPS-00000264-A-00

Figure 6.62 – Sliding the spring loaded collar to release the drive dog

5. Remove the pickup roller and replace the rubber tyre as required, ensuring the drive dog is fully engaged when replaced.

6. Lower the collate clam back down into its original position, and close the Insert Head Perspex top cover once replacement is complete.

6.3.2   Versatile Feeder Feed Tyres

1. Unscrew and remove the three thumb screw knobs in the feed hopper as indicated in Figure 6.63.

QTL-RND-OPS-00000175-A-00

Figure 6.63 – Unscrew and remove the three thumb screw knobs

2. Open the side guides to their widest extent.

3. Lift the feed bed plate out of the chassis to access the feed shaft rollers beneath as shown in Figure 6.64.
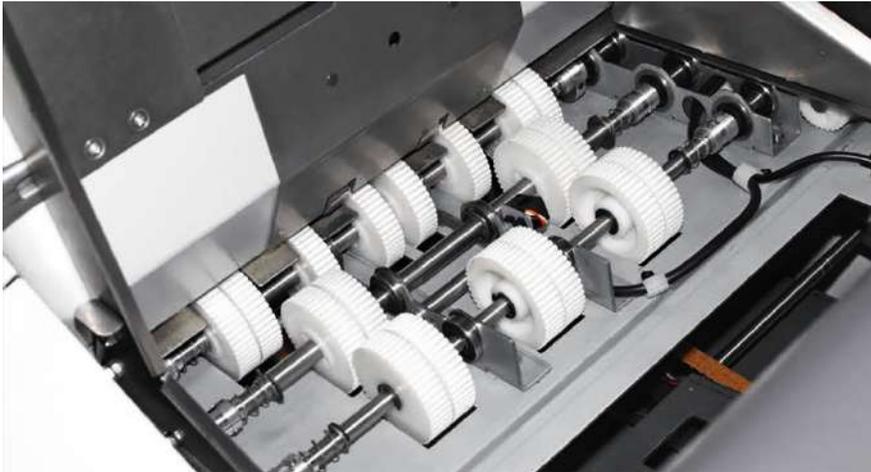
QTL-RND-OPS-00000176-A-00

Figure 6.64 – Lift the feed bed plate out of the chassis

4. Slide the spring loaded collar on each end of the feed shaft roller assemblies inwards to release the drive dog as shown in Figure 6.65.
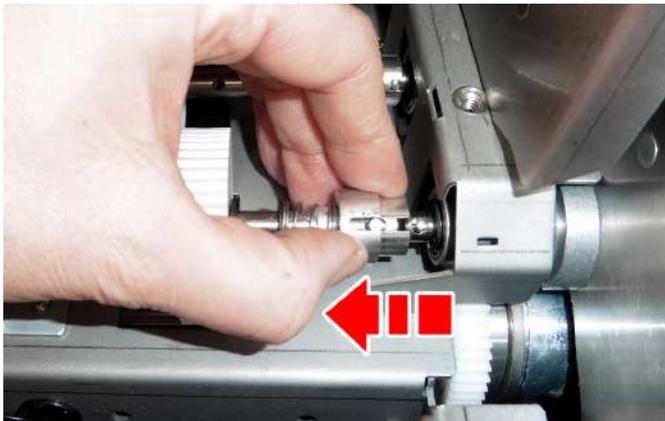
QTL-RND-OPS-00000024-A-00

Figure 6.65 – Sliding the spring loaded collar to release the drive dog

5. Lift the roller assembly feed shaft upwards to remove it from the feed bed.

6. Slip off the roller tyres as shown in Figure 6.66, and replace them as required.

QTL-RND-OPS-00000026-A-00

Figure 6.66 – Replacing the feed tyres

7. When replacing the feed shaft roller assemblies back into the feed bed, ensure that the 'flat spot' on the shaft is located on the operator side as shown in Figure 6.67.
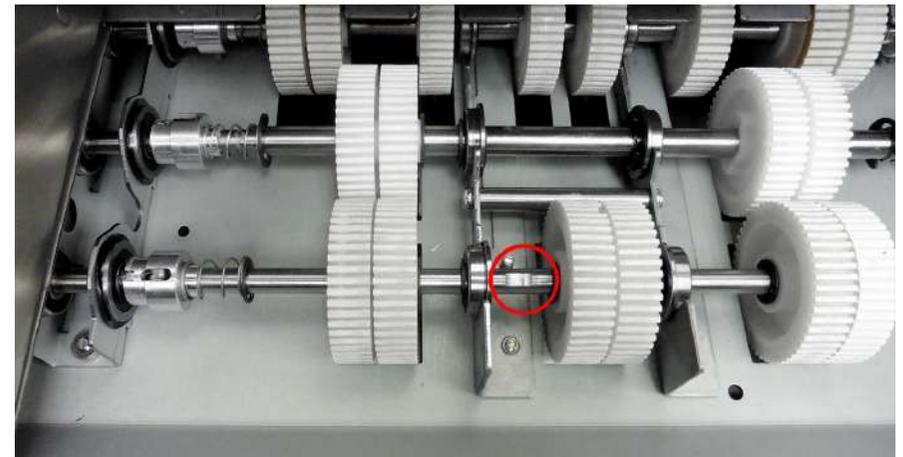
QTL-RND-OPS-00000271-A-00

Figure 6.67 – Shaft 'flat spot' located on the operator side

> ⚠ This indicates a one-way clutch freewheel direction, and if installed on the wrong side, the shaft will rotate but the wheels will not drive.

8.   Ensure the drive dogs on each end are fully engaged as shown in Figure 6.68.
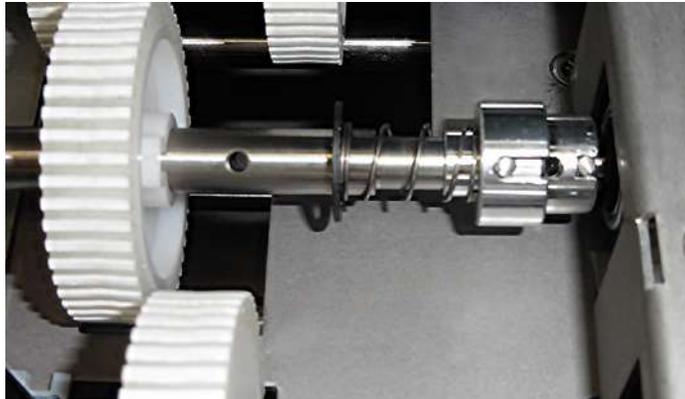
QTL-RND-OPS-00000027-A-00

Figure 6.68 – Drive dog fully engaged

9.   Once complete, re-secure the feed bed plate to the chassis and the three thumb screw knobs.

6.3.3   Tower Folder Pickup Rollers

Initial procedures for the replacement of Tower Folder feed pickup rollers will depend upon the following Tower Folder pod configurations with '**hopper 1**' always being the first uppermost hopper:

2 Pod Configurations

- 4 x 500-Sheet hoppers – hoppers numbered 1 to 4.
- 2 x 500-Sheet hoppers plus 1 x 1000-Sheet hoppers – hoppers numbered 1 to 3.
- 2 x 1000-Sheet hoppers – hoppers numbered 1 to 2.

1 Pod Configurations

- 2 x 500-Sheet Hoppers – hoppers numbered 1 to 2.
- 1 x 1000-Sheet Hopper – hopper is numbered 1.

However, all replaceable rollers may be replaced in a similar way by following the procedures set out below:

1.   Slide the spring loaded collar of the pickup roller assembly on the operator end inwards to release the drive dog as shown in Figure 6.69 or Figure 6.70 (for lower 1000-Sheet hopper).
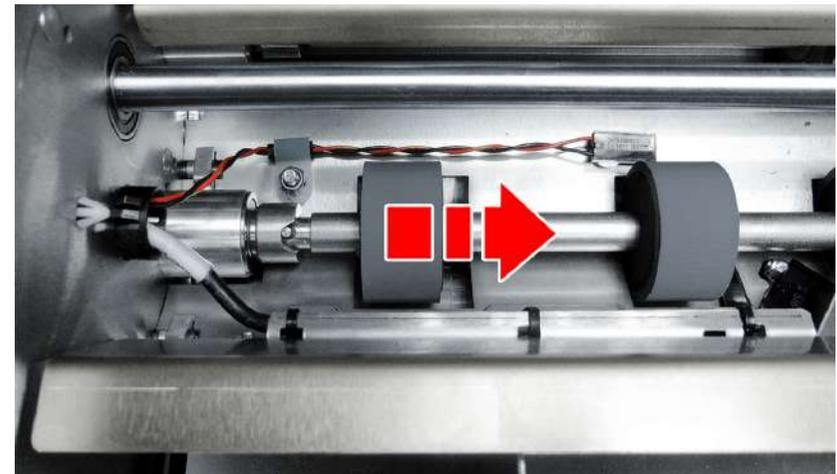
QTL-RND-OPS-00000265-A-00

Figure 6.69 – Releasing the pickup roller drive dog

> ⚠ Raise the blue pick up rollers and shaft clear of the chassis before moving sideways for High capacity hoppers.
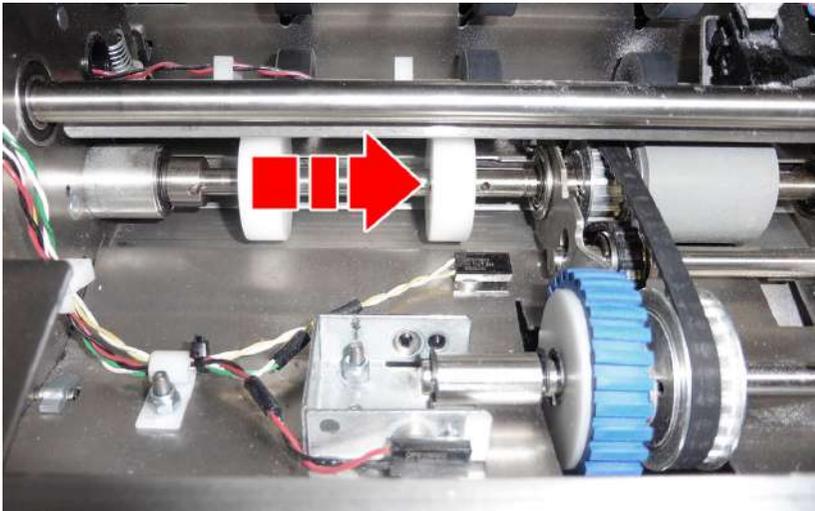
QTL-RND-OPS-00000266-A-00

Figure 6.70 – Releasing the pickup roller drive dog (lower 1000-Sheet hopper)

Note:
The pickup roller and separator assembly are combined for the lower 1000-Sheet hopper.

2. Lift the pickup roller assembly upwards to remove it from the feed bed and replace as required.

3. When replacing the pickup roller assembly back into the feed bed, ensure the drive dog is fully engaged.

6.3.3.1   Hopper 1 Pickup Rollers

1. To access the feed pickup roller for the first uppermost hopper 1, open the Tower Folder top cover.

2. Follow the procedures previously mentioned to replace the feed pickup rollers.

> 📄 See section 6.3.3 Tower Folder Pickup Rollers for further assistance.

3. Close the Tower Folder top cover once replacement is complete.

6.3.3.2   Hopper 2, 3, and 4 Pickup Rollers

To access the feed pickup rollers for hoppers 2, 3, and 4, it is advisable to remove all hoppers for ease of access, beginning with the lowermost subsequent hopper.

1. Slightly lift and gently pull out the hoppers as shown in Figure 6.71 to access the feed pickup rollers for replacement.

QTL-RND-OPS-00000267-A-00

Figure 6.71 – Lifting out the hoppers

2. Follow the procedures previously mentioned to replace the feed pickup rollers.

> 📄   See section 6.3.3 Tower Folder Pickup Rollers for further assistance.

3. Refit the removed hoppers once feed pickup roller replacement is complete.

6.4   Maintaining the Wetter System

The wetter system comprises of a tank which should be removed for cleaning at regular intervals. The tank is replenished by a pump-driven reservoir bottle which will need replacing when the sealing fluid has been depleted.

6.4.1   Cleaning the Wetter Tank

1. Open the side cover of the Insert Head.

2. Using the blue tab as shown in Figure 6.72, lift the end of the wetter tank slightly and withdraw it outwards.
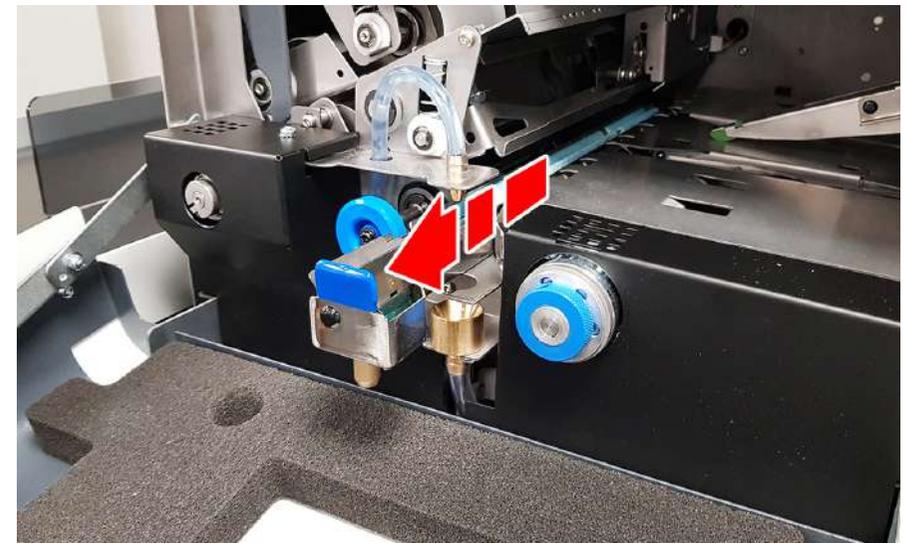
QTL-RND-OPS-00000177-A-00

Figure 6.72 – Cleaning the wetter tank

3. Empty the tank and clean it by running clear water over it for a few minutes.

4. Replace the tank, which will then be replenished automatically by the reservoir bottle.

6.4.2   Changing the Reservoir Bottle

1.   Open the door of the stand below the Insert Head.

2.   Lift the pipes with the attached weight out of the reservoir bottle as shown in
      Figure 6.73.

QTL-RND-OPS-00000178-A-00

Figure 6.73 – Changing the reservoir bottle

3.   Remove the empty reservoir bottle, and replace with a new one.

4.   Replace the pipes into the new reservoir bottle and close the Insert Head stand
      door.

> **!**   For optimum sealing, use only approved sealing fluid.

Troubleshooting Guide   7

7.1   General Troubleshooting

This troubleshooting guide provides possible solutions to operating problems that may arise. It is not intended to provide a complete solution to all the possible problems shown, and should be used in conjunction with advice on curative action from your local Supervisor, or Manufacturer trained Technical Support Engineer.

To minimize faults, always ensure all stationery has been loaded, and that any machine adjustments have been made correctly according to the specific job being processed.

See section 5.1 Setting up a Job for further assistance.

Should persistent operating problems occur, ensure all sensors have been cleaned before taking further action.

See section 6.1.1 Cleaning Sensors for further assistance.

If operating problems cannot be resolved using this guide, contact your local Supervisor, or Manufacturer trained Technical Support Engineer for further assistance.

7.2   Insert Head Troubleshooting

Insert Head Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Poor pick-up of envelopes.	A. Side guides too tight - set to 1mm clearance on each side.
	B. Clean envelope pick-up rollers.
Envelope flaps not opening.	A. Separator is set too tight.
	B. Clean envelope pick-up rollers.
	C. Ensure conveyor cover is fully closed.
Fingers not inserting properly.	Check outer fingers are narrower than the envelope by 9 - 10m on each side but must be wider than the insert. Reduce the side clearance if necessary.
Envelope skewed at insert.	Check side guide clearance - set to 1mm clearance on each side.
Envelopes not arriving at insert area.	Side guides too tight - set to 1mm clearance on each side.

See section 3.4.1.4 Finger Adjust for further assistance.

See section 5.1.1 Loading the Envelope Hopper for further assistance.

See section 5.1.1.1 Envelope Separator Adjustment for further assistance.

See section 6.1.3 Cleaning Rollers for further assistance.

7.3   Versatile Feeder Troubleshooting

Versatile Feeder Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Paper not picking up or not feeding properly.	A. Side guides too tight - set to 1mm clearance on each side. B. Ensure backrest is set correctly. C. Clean feed rollers, and pick-up rollers. D. Separator is set too tight. E. Sensors in feed area blocked or dirty.
Doubles being fed, or stream feeding occuring.	A. Separator gap set too large. B. Clean feed rollers, and pick-up rollers. C. Check side guide clearance - set to 1mm clearance on each side. D. Let stationery settle for 24 hours near to machine before use. E. Check relative humidity - should be between 30 - 80%.

See section **5.1.2 Loading the Versatile Feeder Hopper** for further assistance.

See section **5.1.2.1 Versatile Feeder Separator Adjustment** for further assistance.

See section **6.1.3 Cleaning Rollers** for further assistance.

7.4   Feeder Folder Troubleshooting

Feeder Folder Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Paper not folding correctly.	A. Dirty fold rollers - clean with damp cloth. B. Fold plates incorrectly set - check settings. C. Change standard fold type (e.g. '**C-Fold**' instead of '**Z-Fold**') or use custom fold.

See section **4.4 Fold Settings** for further assistance.

See section **6.1.3 Cleaning Rollers** for further assistance.

7.5   Tower Folder Troubleshooting

Tower Folder Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Paper not folding correctly.	A. Dirty fold rollers - clean with damp cloth. B. Fold plates incorrectly set - check settings. C. Change standard fold type (e.g. '**C-Fold**' instead of '**Z-Fold**') or use custom fold.

See section **4.4 Fold Settings** for further assistance.

See section **6.1.3 Cleaning Rollers** for further assistance.

7.6   Output Conveyor Troubleshooting

Output Conveyor Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Conveyor belt does not move.	A. Ensure '**Continue**' is selected as the Batch mode in Output Settings. B. Check the DIN lead is properly connected to the Insert Head.
Envelopes bouncing off backstop with excessive force on Angled Version.	Move conveyor backstop further away and raise or lower roller plate to adjust eject angle.
Envelopes travel untidily along conveyor on Angled Version.	Fit output rollers in the 2nd position to assist envelope travel. Contact your local Manufacturer trained Technical Support Engineer for further assistance).
Excessive or insufficient gap between batches when in batch mode.	Adjust the '**Batch complete jog step**' in Output Conveyor Settings.
Excessive or insufficient overlap of envelopes on conveyor surface.	Adjust the '**Env Conveyor Drive Delay**' under the Miscellaneous category in Unit Fine Tuning screen.

See section **4.7 Output Settings** for further assistance.

See section **4.7.3 Output Conveyor Settings** for further assistance.

See section **5.1.9 Output Conveyor Backrest Adjustment** for further assistance.

See section **5.2.1 Unit Fine Tuning** for further assistance.

7.7   Output Sorter/Turner Troubleshooting

Output Sorter/Turner Troubleshooting	
Problem	**Suggested Cause and Curative Action**
Envelopes not franking.	Ensure '**Franking Machine**' is selected as the Franker control mode in Franker Output Settings.
Turner Conveyor is not moving.	Check the DIN lead is properly connected to the Insert Head.
Envelopes failing to contact datum edge side guide and failing to turn when they should.	INF Turner backstop is set too far away to allow sufficient '**bounce-back**'.
Envelopes failing to turn properly.	A. Ensure adjustable Turner side guide panel is lowered when turning envelopes. B. Clean the conveyor belt surface.
Envelopes ejecting from wrong exit.	Ensure correct exit is selected in Output Placement.
Envelopes with unexpected Sort Criteria are exiting.	Ensure the mail sort priority is correctly set in Mail sorting settings.
Envelopes failing to leave Sorter properly.	Clean the conveyor belt surface.

See section 4.5.2 Mail Sort Settings for further assistance.

See section 4.6 Output Placement for further assistance.

See section 4.7.2 Franker Output Settings for further assistance.

See section 5.1.11 Turner Side Guide Panel Adjustment for further assistance.

See section 5.1.12 Turner Backstop Adjustment for further assistance.

See section 6.1.2 Cleaning Conveyor Belts for further assistance.

Technical Specifications 8

8.1   General Specifications

Unit Dimensions

Insert Head:
1150mm Length
565mm Width (625mm including monitor arm)
1200mm Height (including furniture)

Versatile Feeder:
410mm Length
565mm Width
1400mm Height (including furniture)

Feeder Folder:
410mm Length
565mm Width
1315mm Height (including furniture)

Tower Folder:
535mm Length (1080mm including accumulator & divert tray)
565mm Width
1500mm Height (including furniture)

> **Note:**
> Fitted with 4 x 500-Sheet Trays.

Output Conveyor:
1600mm Length (including backrest)
420mm Width
435mm Height

Output Sorter:
530mm Length
520mm Width
240mm Height

Turner:
900mm Length
360mm Width
250mm Height

Unit Weights

Insert Head:
101Kg unpackaged
119Kg packaged

Versatile Feeder:
62Kg unpackaged
76Kg packaged

Feeder Folder:
54Kg unpackaged
68Kg packaged

Tower Folder:
114Kg unpackaged
130Kg packaged

> **Note:**
> Fitted with 4 x 500-Sheet Trays, including accumulator & divert tray.

Output Conveyor:
36Kg unpackaged
42Kg packaged

Output Sorter:
26Kg unpackaged

Turner:
28Kg unpackaged

Furniture - Short:
23Kg unpackaged
24Kg packaged

Furniture - Long:
34Kg unpackaged
36Kg packaged

Furniture - Conveyor:
44Kg unpackaged
46Kg packaged

PC, Monitor Arm, Fluid:
31Kg unpackaged
34Kg packaged

Electrical

	UK/Europe/ North America	North America/ Japan	Japan
Input Voltage			
	230 VAC	115 VAC	115 VAC
Frequency			
	50 Hz	60 Hz	50 Hz
Input Current			
Insert Head	0.75 A	1.45 A	1.45 A
Versatile Feeder	0.58 A	0.94 A	0.94 A
Feeder Folder	0.44 A	0.94 A	0.94 A
Tower Folder	1.12 A	1.90 A	1.90 A
Output Sorter	0.30 A	0.60 A	0.60 A
Turner	0.40 A	0.80 A	0.80 A
PC and Monitor	1.20 A	2.40 A	2.40 A
Fuse Rating			
Fitted with up to 7 modules	T8.0 A	T12.5 A	T12.5 A
Fitted with 8 modules	T8.0 A	T12.5 A	T16.0 A
Power Consumption			
Insert Head	180 W	170 W	205 W
Versatile Feeder	135 W	110 W	150 W
Feeder Folder	175 W	110 W	145 W
Tower Folder	300 W	220 W	230 W
Output Sorter	70 W	70 W	70 W
Turner	95 W	95 W	95 W

Heat Output

Watts = rated current x Rated Voltage
Heat output is measured in British Thermal Units (BTUs) - BTU/hour = Watts x 3.412.

Below are examples for a typical configuration consisting of Insert Head, 1 x Feeder Folder, 2 x Versatile Feeders, 1 x Tower Folder.

	UK/Europe/ North America	North America/ Japan	Japan
Heat Output			
Watts: (typical configuration)	915 W	710 W	875 W
BTU/hr: (typical configuration)	3122 BTU/hour	2423 BTU/hour	2986 BTU/hr

Operating Conditions

Operating Temperature: 18 - 28 deg C (64 - 82 deg F)

Operating Humidity: 30 - 80% RH

Audible Noise

Operating (continuous):   75dB(A) Max.

Note:

75dB(A) measured with Insert Head, 1 x Feeder Folder, 2 x Versatile Feeders, 1 x Tower Folder at an approx. height and distance of 1.5m.

Daily noise exposure: LAeq(8) < 78.0 dB(A)

Note:

LAeq(8) is lower than the first action level required by:

- Europe - Physical Agents (Noise) Directive 2003/10/EC.
- K - Health & Safety. The Control of Noise at Work Regulations 2005 statutory instruments 2005 No. 1643.

> ⚠ If the work place supervisor is concerned about exposure to noise, it is recommended that they should advise the use of ear protection to operators of this equipment.

Ambient Light

Although the machine may operate in sunlight, it is not designed for use in direct sunlight, or where sunlight is exposed to the machine through windows or skylights.

Light-sensitive sensors within the machine can be affected in these conditions, therefore the following is recommended by the manufacturer:

- Position the machine out of direct sunlight when installing.
- Protect the machine from direct sunlight using blinds or similar blocking devices.

If the machine can only be located where it may be exposed to direct sunlight, then please contact your local Technical Support Engineer, who may be able to advise on the use of blocking material on the inside of the Perspex cover where necessary.

Important Notes

- All stationery should be allowed to acclimatise near the machine for at least 24 hours before use to prevent rapid absorption of moisture in the material, or condensation forming on the machine. Failure to acclimatise the material may cause pre-gumming of envelopes or otherwise impair machine performance.
- The machine will function with humidity levels lower than 30% RH, but high levels of static may be generated, impairing machine performance.
- The machine will function with humidity levels higher than 80% RH, but moisture absorption into the material may impair machine performance.
- Condensation must not be present under any circumstances.
- The machine will function at temperature levels above 28 deg C (82 deg F) and below 18 deg C (64 deg F). However, temperature levels outside these limits may impair the machine performance.
- Material processed directly from laser printers may have high levels of static causing material to stick together. If double feeding occurs, then Hi-Grip separators may be required - contact your local Technical Support Engineer for further assistance.

8.2   Insert Head Specifications

Envelope Hopper Capacity

C5 Envelopes (or below):	Up to 800 of 90gsm (24lbs bond)
C4 Envelopes (flat type):	Up to 500 of 100gsm (28lbs bond)

> **Note:**
> Envelope Hopper can be loaded whilst the machine is running.

Envelope Sealing Fluid

Built-in wetter tank, automatically pump-fed by 10-litre wetter container located in the stand.

> **Note:**
> An optional low-level float switch available if water is used.

Receiving Tray Capacity (Optional)

C6/5 Envelopes:	215 filled envelopes
C4 Envelopes:	300 filled envelopes

> **Note:**
> Figures noted assume only 1 document is inserted into the envelope.

Monthly Volume

Up to 300,000 filled envelopes per month.

8.2.1   Pack Details

Pack Thickness

Standard Inserter: All envelopes up to 6mm (15/64")

With Max Pack licence: All envelopes up to 10mm (25/64")

Note:

Max. pack thickness is defined as the internal dimension of a rigid opening that a filled envelope will fall through under its own weight.

Pack Clearance

The minimum clearances required between the inserts and envelopes are dependent on the insert pack thickness.

Clearance is the total clearance and is defined as the difference between the largest overall dimensions of the pack and the internal dimensions of the envelope as shown in Figure 8.1.

The required clearances are summarised as follows:

Pack < 3mm: Depth 6mm (1/4") - Width 16mm (5/8")

Pack > 3mm to 6mm: Depth 12mm (1/2") - Width 19mm (3/4")
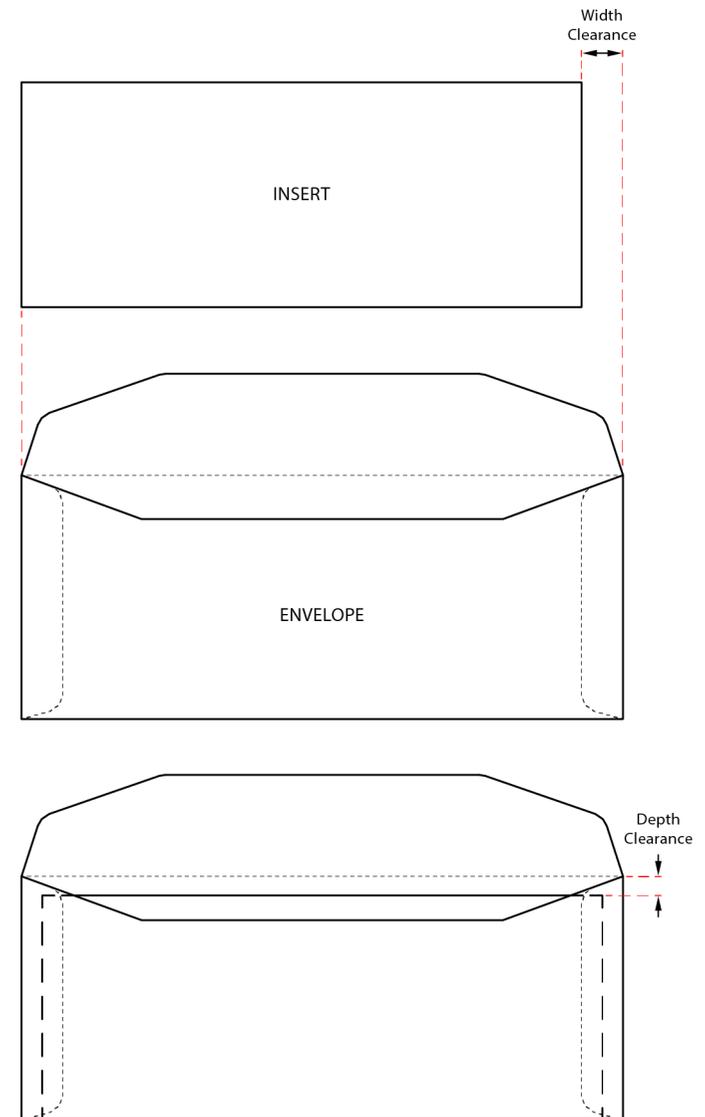
QTL-RND-GEN-00000093-A-00

Figure 8.1 – Pack clearance

8.2.2   Envelope Details

Envelope Weight

C5 Envelopes (or below):   Min. 70gsm (18lbs bond)

Max. 110gsm (28lbs bond)

Above C5 Envelopes: Min. 90gsm (24lbs bond)

Max. 110gsm (28lbs bond)

Envelope Requirements

▪ Envelope to be of good quality machine-fill type

▪ Dimensions and quality to be consistent across manufactured batches

▪ Side seams must be securely glued to the top of the seam

▪ Flap crease must be pre-scored to enable the envelope flap to open flat

Note:

Flap length > 48mm reduces the machine speed.

▪ No glue seepage must be evident on the interior or exterior of the envelope

Observe the envelope specifications as shown in Figure 8.2 and Figure 8.3.
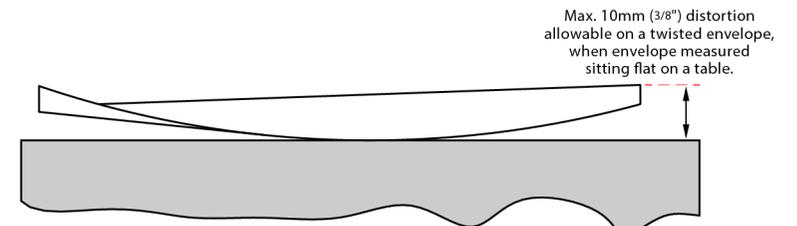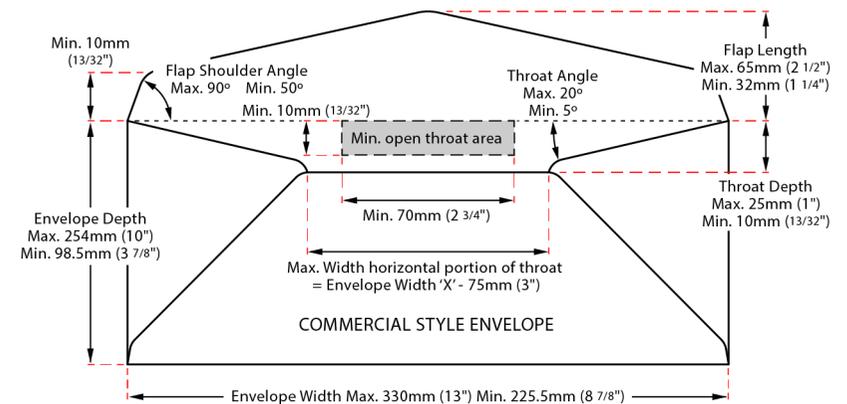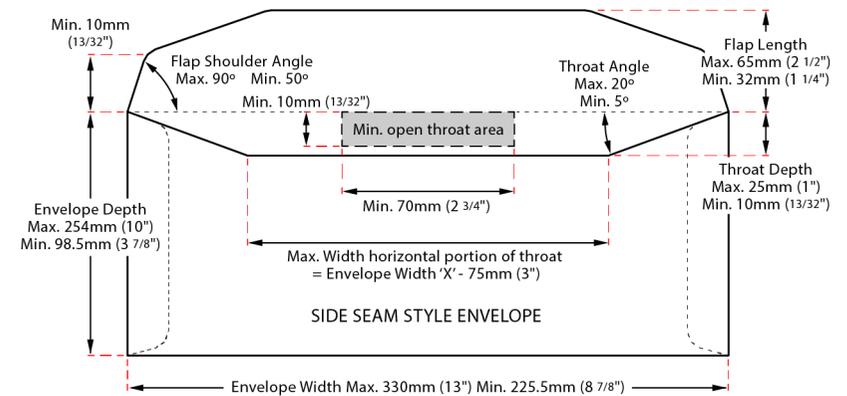
Figure 8.2 – Envelope specifications

Position of internal side seams to give a minimum of
5mm (3/16") clearance or overlap to the edge of eny insert.

Flap crease to be scored sufficiently
to prevent distortion of envelope between
window and flap crease when closing and sealing.

Min. 14mm to edge
of address carrier

Min.
20mm

Top edge of window to be flat
and free from puckering.

Windows to be securely
affixed to within 1.5mm (1/16")
of top and side edges.

Glue area

Window width to be less
than 40% of envelope width

The bottom flap of the envelope should be
in-line or below the top of the seam shoulders.

Good
example

Bad
example
(Out of Specification)

QTL-RND-GEN-00000095-A-00

Figure 8.3 – Envelope specifications

8.3   Versatile Feeder Specifications

Hopper Capacity

A4 Documents unfolded: Up to 1000 of 80gsm (20lbs bond)

A4 Documents (Z-Fold):   Up to 500 of 80gsm (20lbs bond)

Booklets: Up to 250 (2.4mm)

C6/5 Envelopes: Up to 500

Note:

Quantities shown above are maximum figures. Depending upon other conditions, actual quantities may be lower than those shown.

8.3.1   Enclosure Details

Enclosure Size

Width: Min. 148mm (5¾")

Max. 305mm (12")

Note:

Min. pack width for individual items is 210mm (8¼").

Length: Min. 76mm (3") for Station 1

Min. 89mm (3½") for Stations 2 to 8 (non-reading units)

Max. 216mm (8½")

Note:

Max. suggested width difference between inserts is 32mm (1¼"). This may be increased subject to testing. If this difference is exceeded, the insertion fingers will not cover the edges of the narrow insert and may cause insertion problems. Sandwiching a narrow insert between two wider ones may resolve this problem.

Enclosure Weight

Min: 75gsm/80gsm (20lbs bond)

Max: 6mm (¼") thickness

Enclosure Requirements

▪ Enclosures must be flexible enough to suit path constraints.

▪ Some enclosures may require special tyres.

8.3.2   Versatile Feeder Cycling Speeds

Envelope	Document	Fold type	5K Speed 8K (Accum.)	5K Speed 14K (Accum.)	7K Speed 14K (Accum.)
C4 (324mm)	1 x A4	N/A	3,550	3,550	5,250
C4 (324mm)	8 x A4	N/A	800	800	800
C4 (324mm)	10 x A4	N/A	625	625	625
C4 (324mm)	15 x A4	N/A	425	425	425

Note:

Figures calculated as units per hour.

8.4   Feeder Folder Specifications

Hopper Capacity

Up to 500 sheets of 80gsm (20lbs bond).

Note:

Quantities shown above are maximum figures. Depending upon other conditions, actual quantities may be lower than those shown.

8.4.1   Feeder Folder Paper and Fold Details

Paper Size

Width: Min. 140mm (5½")

                               Max. 229mm (9")

Depth: Min. 140mm (5½")

                               Max. 406mm (16")

Depth of output document: Min. 89mm (3½")

                               Max. 152mm (6")

Note:

Folded and non-folded documents must fall within the depth of output sizes for successful processing through the unit.

Paper Weight

Min: 60gsm (16lbs bond)

                               70gsm (18lbs bond) for OMR / Barcode paper

Max: 120gsm (32lbs bond)

Folding Capacity

C or Z-Fold:	Up to 3 sheets of 80gsm (20lbs bond)
V-Fold:	Up to 5 sheets of 80gsm (20lbs bond)

Fold Lengths

Fold Plate 1:	Min. 59mm
	Max. 229mm
Fold Plate 2:	Min. 51mm
	Max. 153mm

8.4.2   Feeder Folder Cycling Speeds

Envelope	Document	Fold type	5K Speed 8K (Accum.)	5K Speed 14K (Accum.)	7K Speed 14K (Accum.)
C6/5 - DL (114mm)	1 x A4/Letter	C-fold	5,000	5,000	5,400
C6/5 - DL (114mm)	2 x A4	C-fold	2,675	2,700	2,700
C6/5 - DL (114mm)	4 x A4	C-fold	1,325	1,325	1,350
C6/5 - DL (114mm)	1 x A4 + BRE	C-fold	4,950	4,950	4,975
#10 (105mm)	1 x Letter	C-fold	5,000	5,000	5,525
#10 (105mm)	2 x Letter	C-fold	2,750	2,750	2,775
#10 (105mm)	4 x Letter	C-fold	1,375	1,375	1375
C5 (162mm)	1 x A4	V-fold	4,350	4,350	5,450
C5 (162mm)	2 x A4	V-fold	2,700	2,700	2,725
C5 (162mm)	4 x A4	V-fold	1,350	1,350	1,350

Note:

Figures calculated as units per hour.

8.5   Tower Folder Specifications

Hopper Capacity

The Tower Folder can be fitted with upto 2 pods, each fitted with 1 or 2 hoppers as follows:

- 2 x 500 sheets of 80gsm (20lbs bond)
- 1 x 1000 sheets of 80gsm (20lbs bond)

Pod Configuration

2 pod and single pod configurations are available for the 7700 Series, and are shown in Figure 8.4 with the following configurations:

- **2 Pod**
  1. 2 Pod - 4 x 500-Sheet Hoppers.
  2. 2 Pod - 2 x 500-Sheet Hoppers and 1 x 1000-Sheet Hopper.
  3. 2 Pod - 2 x 1000-Sheet Hoppers.

- **Single Pod**
  4. 1 Pod - 2 x 500-Sheet Hoppers.
  5. 1 Pod - 1 x 1000-Sheet Hopper.

> **!** Contact the Formax Technical Support department for further information regarding pod configurations for the Tower Folder.
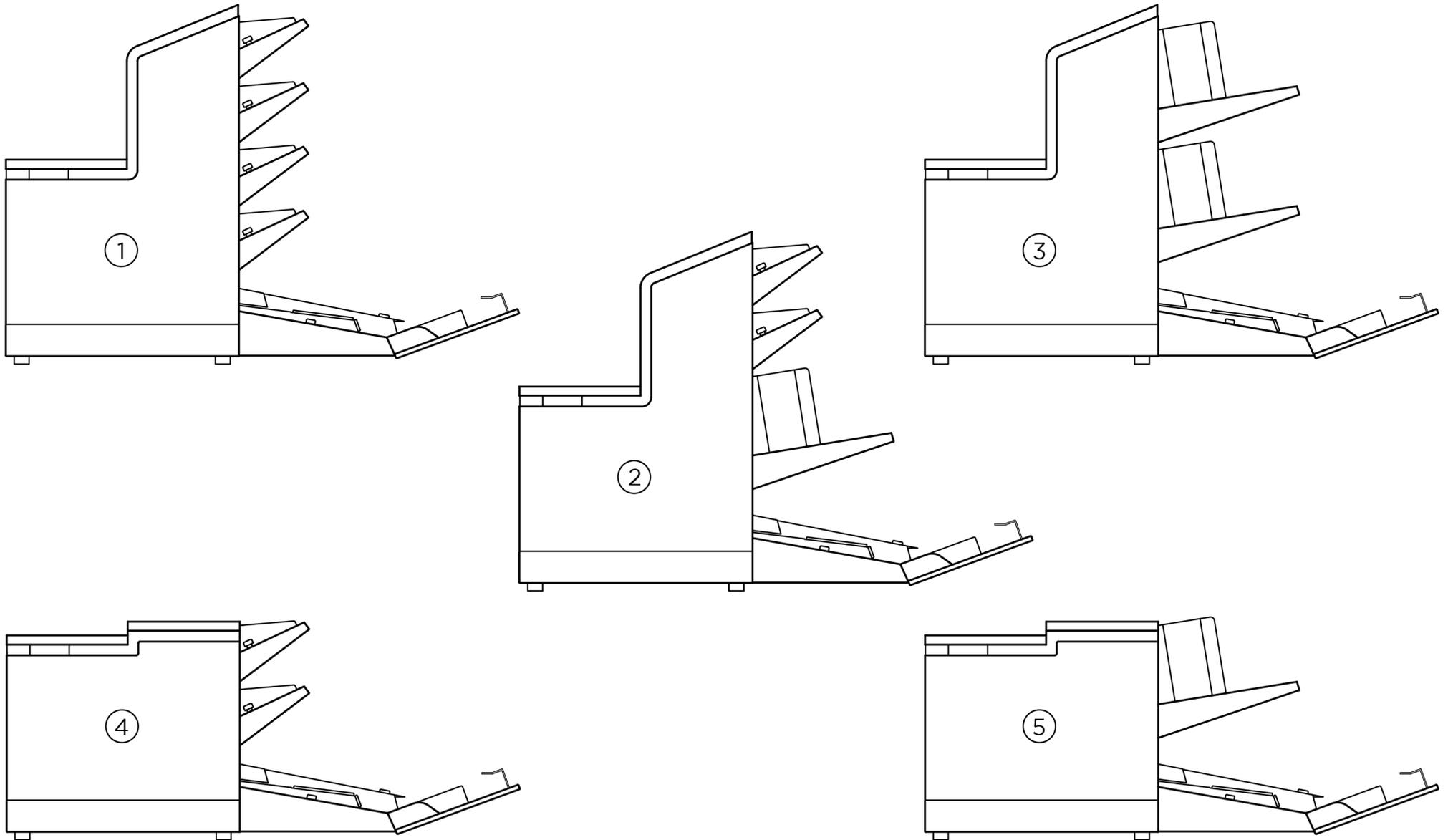
Figure 8.4 – Tower Folder Configurations

QTL-RND-GEN-00000193-A-00

8.5.1   Tower Folder Paper and Fold Details

Paper Size

Width:	Min. 148mm (5¾")
	Max. 305mm (12")

Note:

Min. pack width for individual items is 210mm (8¼").

Max. width when folding is 229mm (9").

Depth:	Min. 93mm (3⅝")
	Min. 140mm (5½") when reading and using accumulator
	Max. 406mm (16")

Note:

Max. suggested width difference between inserts is 32mm (1¼"). This may be increased subject to testing. If this difference is exceeded, the insertion fingers will not cover the edges of the narrow insert and may cause insertion problems. Sandwiching a narrow insert between two wider ones may resolve this problem.

Paper Weight

Min:	70gsm (18lbs bond)
Max:	200gsm (53lbs bond) for unfolded paper
	120gsm (32lbs bond) for folded documents
	2.5mm thick for Daily Mail (subject to testing)

Folding Capacity

C, Z, or V-Fold:	Up to 8 sheets of 80gsm (20lbs bond)
Double-forward Fold:	Up to 4 sheets of 80gsm (20lbs bond)

Note:

Multiple folded sets dependent upon pack thickness.

Fold Lengths

Fold Plate 1:	Min. 50mm
	Max. 237mm
Fold Plate 2:	Min. 85mm
	Max. 232mm
Fold Plate 3:	Min. 50mm
	Max. 135mm

8.5.2   Tower Folder Cycling Speeds

Envelope	Document	Fold	5K Speed 8K (Accum.)	5K Speed 14K (Accum.)	7K Speed 14K (Accum.)
C6/5 - DL (114mm)	1 x A4/Letter	C-fold	5,000	5,000	7,000
C6/5 - DL (114mm)	2 x A4	C-fold	4,000	5,000	7,000
C6/5 - DL (114mm)	4 x A4	C-fold	2,000	3,500	3,500
C6/5 - DL (114mm)	1 x A4 + BRE	C-fold	4,800	4,800	4,975
#10 (105mm)	1 x Letter	C-fold	5,000	5,000	7,000
#10 (105mm)	2 x Letter	C-fold	4,025	5,000	7,000
#10 (105mm)	4 x Letter	C-fold	2,000	3,500	3,500
C5 (162mm)	1 x A4	V-fold	4,350	4,350	5,950
C5 (162mm)	2 x A4	V-fold	4,025	4,350	5,950
C5 (162mm)	4 x A4	V-fold	2,000	3,500	3,500
C4 (324mm)	1 x A4	unfolded	3,550	3,550	5,250
C4 (324mm)	8 x A4	unfolded	1,000	1,750	1,750
C4 (324mm)	10 x A4	unfolded	800	1,400	1,400
C4 (324mm)	15 x A4	unfolded	525	925	925

Note:

Figures calculated as units per hour.

Multiple page speeds are calculated via the Tower Folder accumulator.

Document	8K Accumulator Licence	14K Accumulator Licence
Accumulation speed A4 unfolded documents	8,000	14,000

Note:

Figures calculated as units per hour.

! When feeding from a non-prime hopper (i.e. hopper not directly in front of CIS scanner), accumulation speed from the hopper will decrease.

8.6   Output Conveyor Specifications

Conveyor Speed

- Linear Speed (controlled by Insert Head)
- Selectable jog function for batching.

8.7   Output Sorter/Turner Specifications

Sorting Criteria

All envelopes within specification and pack thicknesses are suitable for sorting.

Note:

Speed of machine will not be affected from quoted speeds.

Turning Criteria

Maximum turning speeds achieved are dependent on pack and output configurations as shown in Table 8.1.

		Conveyor Only	Divert	Base-only Franking	DEP	Print and Frank	Dynamic Franking
DL C6/5 (#10)	1			7,000			
	2						
	4			3,500			
	8			1,750			
C5 (6x9)	1	5,950		5,100 (Franker Interface)			
	2						
	4			3,500			
	8			1,750			
C4 (Flats)	1	5,250		4,000 (Turner)			
	2						
	4			3,500			
	8			1,750			
Over 150g				4,000 (Pack Weight)			

Table 8.1 – 7700 Series maximum turning speeds

Note:

Max. 400g total pack weight.

C4 & C5 with vertical windows will be turned, other sizes will pass unturned.

8.7.2   Compatible C4 Envelopes

Compatible C4 envelope windows shown in Figure 8.5 are suitable for use on a Turner:

Note:

Envelope turning is determined by the address position selected when programming the job.
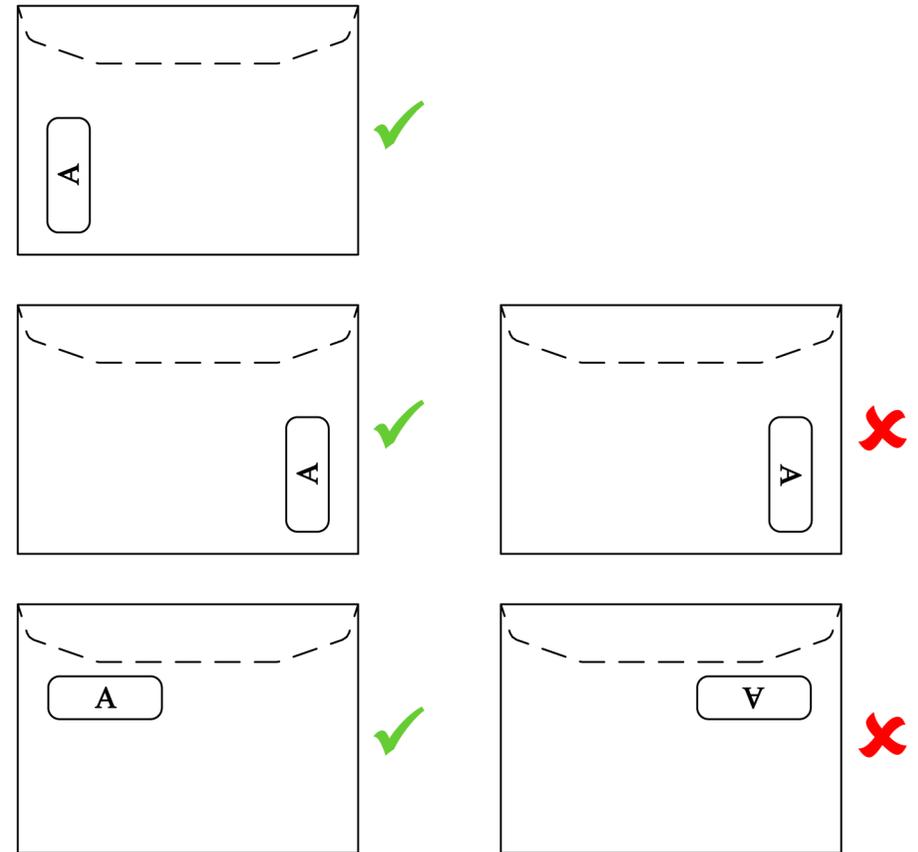
QTL-RND-GEN-00000099-A-00

Figure 8.5 – Compatible C4 envelope windows

8.8   Daily Mail Specifications

Versatile Feeder

Documents / Packs: Up to 6mm (thickness)

Unfolded: Up to 25 sheets of 80gsm (20lbs bond)

- May be stapled or not
- Maximum thickness of staple 3mm

Feeder Folder

C or Z-Fold: Up to 3 sheets of 80gsm (20lbs bond)

V-Fold: Up to 5 sheets of 80gsm (20lbs bond)

- May be stapled or not, but staples on Z-Fold only
- Maximum thickness of staple 2mm

Tower Folder

Unfolded: Up to 25 sheets of 80gsm (20lbs bond)

C or Z-Fold: Up to 8 sheets of 80gsm (20lbs bond)

Double-forward Fold: Up to 4 sheets of 80gsm (20lbs bond)

- May be stapled or not
- Maximum thickness of staple 3mm

See section 8.8.1 Staple Restrictions for further assistance.

8.8.1   Staple Restrictions

The following staple restrictions shown in Figure 8.6 apply when using Daily Mail.

QTL-RND-GEN-00000091-A-00
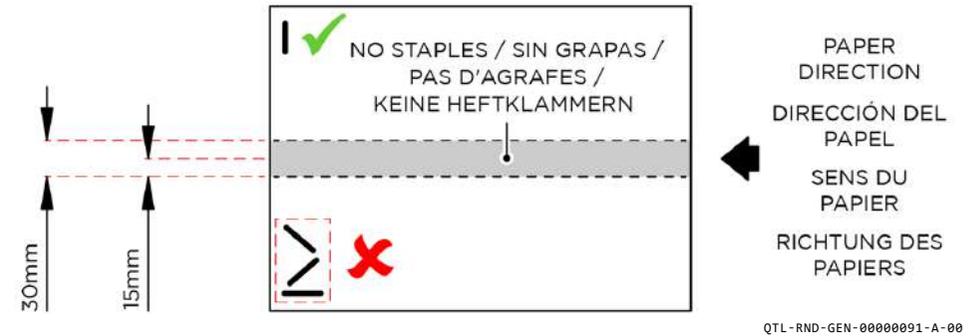
Figure 8.6 – Staple restrictions

Document must be fed stapled end first only.

8.9   Cycling Speeds Troubleshooting

The following information detailed in this section describes certain tasks and situations which can affect optimal cycling speeds.

General

- High-speed licences not installed.
- Hopper de-skew is turned on.
- Paper type is set to 'Glossy'.
- Thick documents may limit collating on the fly down the track.
- Forced pack order in a job.
- Diverting groups.
- Output units / Franker / Printer.

Insert Head

- Linear speed not at top speed.
  - If not, set to 'Fast as possible' in twiddle screen.
  - If the pack weight exceeds a certain limit, then it will slow the linear speed.
- Larger envelope sizes.
- Flap length programmed greater than 48mm – Disables dual loading.
- Envelope reverse position increased from standard.
- Envelope seal position.
- Envelope seal time increased in a job.
- Number of packs in a group.
- Wetter position.

Versatile Feeder

- Feeding multiples – They collate using the Inserter.
- Region of Interest (ROI) on the trailing edge of the page as fed.
- 2D/1D labels on the trailing edge of the page.
- Large label size – Increases decode time.
- Prime downstream and select feeding.

Feeder Folder

- Feeding multiples – They collate using the Inserter.
- Region of Interest (ROI) on the trailing edge of the page as fed.
- 2D/1D labels on the trailing edge of the page.
- Large label size – Increases decode time.
- Prime downstream and select feeding.

Tower Folder

- Linear speed of pod not at top speed.
  - If not, set to 'Fast as possible' in twiddle screen.
  - If documents are bypassing the accumulator, then the speed is automatically forced to low.
- Feeding multiples that are bypassing the accumulator.
- Loose hopper separator resulting in document overrun into the de-skew area – There is a delay to ensure it doesn't get picked up by the vertical drive.
- Hopper selection.
- Reading on Lower CIS and not feeding from the closest hopper.
- Reading on Upper CIS.
- Region of Interest (ROI) on the trailing edge of the page as fed.
- 2D/1D labels on the trailing edge of the page.
- Large label size – Increases decode time.
- Prime downstream and select feeding.
- Cascading.

8.10   Reading Specifications

A CIS (Contact Image Scanner) reading device is fitted to Versatile Feeders (Mark-reading versions only), and may be optionally fitted to Feeder Folders, and Tower Folders.

It consists of a paper-width unit capable of reading Barcodes (1D & 2D), and OMR marks (1-track & 2-track) with a maximum scanning width of 216mm for the Feeder Folder, and 300mm for the Versatile Feeder (Mark-reading), and Tower Folder.

Disposal Instructions 9

9.1 End of Product Life

The objectives of the European Community's environment policy are, in particular, to preserve, protect and improve the quality of the environment, protect human health and utilise natural resources prudently and rationally.

That policy is based on the precautionary principle and principles that preventive action should be taken, that environmental damage should as a priority be rectified at the source.

Separate collection of waste is the precondition to ensure reuse and recycling of waste that is generated at the disposal of electrical or electronic equipment and is necessary to achieve the chosen level of protection of human health and the environment within the European Community (EC).

More particularly, certain materials and components of electrical waste, and electronic equipment need selective treatment as their injudicious handling or disposing of on or into land, water, or air would represent a major threat to the environment and human health.

In order to facilitate collection and treatment separated from normal domestic waste, electrical and electronic equipment is marked with the following WEEE Directive logo:
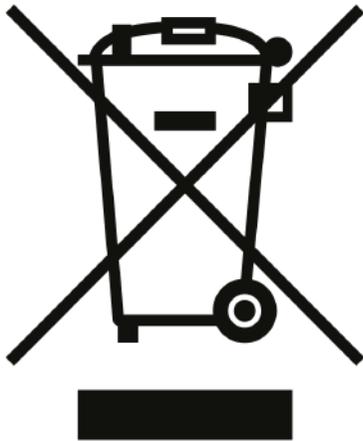
QTL-RND-MSC-00000032-A-00

- Do not mix with normal domestic waste.
- Please use the sub-joined return or collection system dedicated to the disposal of electrical and electronic waste.
- Equipment produced after August 13 2005.

Not only are you by law not allowed to dispose of the waste equipment via other waste-streams, but we encourage you to actively contribute to the success of such collection and to the common good and better quality of life of present and future generations.

For more information on the correct disposal of this product please contact your local regulatory authority.