Selex ES
A Finmeccanica Company

Automation Systems

CFSM
COMPACT FLAT SORTING MACHINE

The Selex ES Compact Flat Sorting Machine (CFSM) presents a highly reliable solution for the processing of flat mail; the extremely flexible, and most compact machine in its category, CFSM represents an excellent trade-off between performance and investment cost.

The machine has recently been updated, introducing new functionalities and improving overall productivity.

Today, the new generation CFSM is ready to face the emerging challenges of a postal market that is constantly seeking the right balance between consistent performance, advanced functionality and wide range of machineable mail.

Maintaining the spirit of its original intent - the simplicity and linearity of the design - Selex ES has now enriched both the functionality and the system performance.

Whilst preserving its distinctive characteristic as the most compact system available in this market today, the CFSM can process existing mail in a sorting centre with maximum flexibility - provided by the multiple functions available. These unique features make the CFSM the best choice for low- to mid-size sorting centres, where one machine can process a broad range of mail.

AUTOMATIC FEEDER

The automatic flat- feeder can handle the full range of flat mail types (including folded newspapers, open magazines, catalogues, advertising mail, plastic wrapped and flimsy objects) at a very high level of throughput, exceeding 14,000 items per hour. Due to the high feeding rate an additional tray unloading device can be provided to allow the feeder to be operated by just one person, in compliance with ergonomic rules.

MANUAL FEEDER

The manual feeder is designed to process residual mail, that cannot be processed through an automatic feeder, due to its weight, size and irregularity of shape, content or wrapping. This includes very thick (up to 63mm) and heavy (up to 3kg) items such as books, and irregularly shaped items such as rollers. The operator codes each postal item using the barcode reader and/or by keying in the destination code. The feeder can be optionally equipped with an image acquisition camera to avoid manual coding and increase productivity of the feeder.

READING AND CODING

The image acquisition camera acquires the entire surface of the item and sends it to the coding system to determine the destination code. The transport system provides on-line video coding delay with the possibility to adjust the time available for encoding.

Offline or remote video coding involves the printing of an ID-tag on every item, if not already present. A label is applied to ensure correct printing on items in plastic or visually 'busy' wrapping.

Optionally, an additional image acquisition camera can be installed to capture the reverse side of the item, and additional printers can be used for B/W codes, logos and advertisements.

SORTING

Each sorting module hosts 24 tray outlets on two levels (up and down) and two sides (front and back). Postal items are injected into the sorting carousel and subsequently discharged at zero relative speed, ensuring excellent facing. Large, easy to read displays present the destination information for each outlet. Label printers are located in a convenient position for the operator; printing is driven by luminous push-buttons located in correspondence with the outlets. Manual sweeping of both the upper and lower outlets is easy and ergonomic. Full and empty trays can be managed by tray handling systems if required.

MACHINE AND PROCESS MONITORING

The CFSM process monitoring system provides supervision and process control using touch-screen technology. It collects and manages all the information and processing data, providing synoptic views, alarm messages and statistics reports. The sort-plan management system can receive standard .xml sort-plans from external proprietary systems.

ADDITIONAL FUNCTIONALITIES

The CFSM is capable of processing registered mail, incorporating all the required functionality to interface tracking and tracing system and sorting of certified and registered mail and automatic printing of the item list for each outlet.

Mixed mail sorting

The CFSM can be used to sort according to the mail class on the base of information captured automatically from the

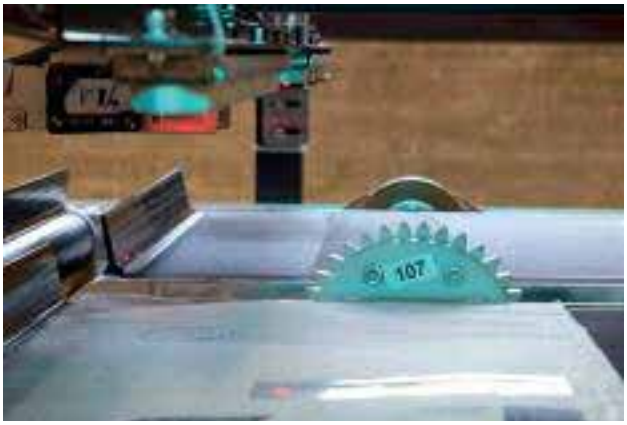
letter (i.e. registered or insured mail class): the mail can be sorted in separated outlets or mixed in the same outlet, according to the selected sorting scheme.

Multi-Sorting by Indicia
The CFSM can perform online Indicia recognition (e.g. DPM, commercial bar codes, etc.), image storage and retrieval, as well as merging indicia information with address coding to sort mail pieces into specific separations.

Labelling Device
The CFSM can be equipped with a labelling device to print address and barcode labels (including 2D) and affix them directly to the mail.

Cancelling Device and advertising printer
The CFSM can be equipped with an additional cancelling device module and advertising printer which cancels stamps and prints advertisements in predefined areas.

Automatic Sweeping System
At any point in time, the CFSM can be interfaced with an automatic sweeping system that provides automatic management of full and empty trays.



MAIN BENEFITS

The major benefits offered by CFSM include:

- Minimum space occupation
- Highly flexible configurations
- Largest range of processable mail in its category
- Interface flexibility with other systems
- Very low jam and damage rate
- Double-feed detection and segregation
- Excellent face-up stacking
- Low maintenance
- Minimal requirement for human interaction
- High safety standards
- Excellent ergonomics.

TECHNICAL SPECIFICATIONS

General Information

Acceptable range of mail	length: 140 mm - 400 mm height: 90 mm - 305 mm thickness: 0.5 mm - 63 mm weight: 10 g - 3000 g
Configurations	outlets up to 400 units automatic inductions up to 4 units manual inductions up to 8 units
Machine dimensions for a configuration with: • 260 outlets 2 automatic feeders • 1 manual feeder	length: 34,180 mm width: 2,260 mm height: 1,900 mm

Performance

Nominal throughput for a configutation with: • 260 outlets, 2 automatic feeders • 1 manual feeder	up to 28,000 pcs/h
Availability	> 98%

Technical

Noise level	< 70 dB(A)
Conformity to standards	CE

For more information please email **infomarketing@selex-es.com**
Selex ES S.p.A - A Finmeccanica Company
Via Puccini 2 - 16154 Genova - Italy - Tel: +39 010 65821 - Fax: +39 010 6582898