

# POSTAL INTRALOGISTICS

TRANSPORT AND PROCESSING  
IN POSTAL CENTRES





### Conveying systems for trays and unit loads mecom® future

The mecom® future conveying systems for trays and unit loads offer logistics solutions for both simple and complex material flows. Modular elements transport, sort, distribute, stack, store and pick the goods to be conveyed horizontally or vertically between various destinations.

Horizontal transport is by means of conveyor belts, roll conveyors and accumulating roll conveyors. Various elements are available for changes of direction, depending on the requirements. Changes of height are achieved by means of S-/C-conveyors, paternosters and lifts. The mecom® future is a high performance conveying system suitable for trays and unit loads with unit weights up to 50 kg. They can be used in combination with other Gilgen conveyor systems or storage techniques.

By the tray management system TMS the trays are conveyed from the letter sorting machine. After the fully automatic labeling the containers are conveyed to the respective dispatch line.

### Conveying systems for parcels mecom® 5800

This high performance conveying system is employed for conveying parcels to the parcel sorting machines. Conveying belts transport the parcels at speeds of over 2 m/s. For distribution from one conveyor belt to two transport tracks, cross switch units are employed which can distribute over 4'500 parcels per hour alternately. In another stage, the merger points bring together the parcels from two conveying lines onto one at a rate of 7'000 parcels per hour.

### Automatic tray unloading devices TUD

The tray unloading device prepares the full mail tray to be feeded into the letter sorting machine. The tray is lifted and the operator can easily take the mail to feed the machine. Feeding throughput is increased, because there is no need for the operator to get the next full tray and place it. Note as well that working with TUD replaces the heavy lifting of mail trays: the operator works more conveniently. Tray handling costs can be reduced. The TUD can be interfaced with a material handling system.

### Overhead conveying systems licom®

The modular system construction enables an individual solution to be provided as well as cost-effective expansion. The following basic concepts are available:

#### licom®-k

Continuous chain conveyor for simple configurations.

#### licom®-s

Monorail system with individually driven trolleys, switches, inclines, vertical transport and stacking functions for small to medium-sized systems.

#### licom®-l

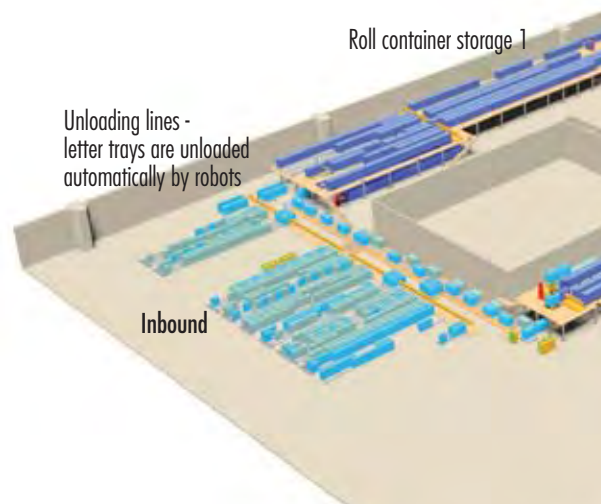
Overhead conveying system with stationary linear motors, conveys, stacks and sorts postbags with unit weights of up to 50 kg at a speed of up to 2 m/s. This system is designed for large and complex installations with extreme requirements and can be found throughout the world, mainly in postal operations.

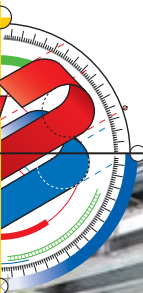


Roll container storage 1

Unloading lines - letter trays are unloaded automatically by robots

Inbound





### Conveying and storage systems for roll containers

Roll containers full of letter trays are delivered by road or rail and loaded onto the conveyor system by hand in the inbound area. The system then works fully automatically until the mail is delivered to the picking area.

The roll containers are placed on the unloading lines at the arrival point where the letter trays are unloaded automatically by robots. The roll containers are conveyed to their respective buffers by shuttle cars and conveyor lines, and then placed into intermediate storage. Stored roll containers are retrieved and delivered to selected picking areas as and when required. The buffer lines form a connection between the inbound and outbound sectors.

### Automatic loading and unloading systems for roll containers

Postal roll containers can be loaded and unloaded automatically. Different systems are employed, according to the contents of the containers.

- Loose parcels or postbags arrive directly on the transport belts via automatic tipping devices.
- Roll containers with letter trays are emptied by means of portable robots. The trays are placed directly on a conveying system for the next stage of processing. The high capacity of these systems is ensured by its ability to remove several trays simultaneously.

### Roll containers RX

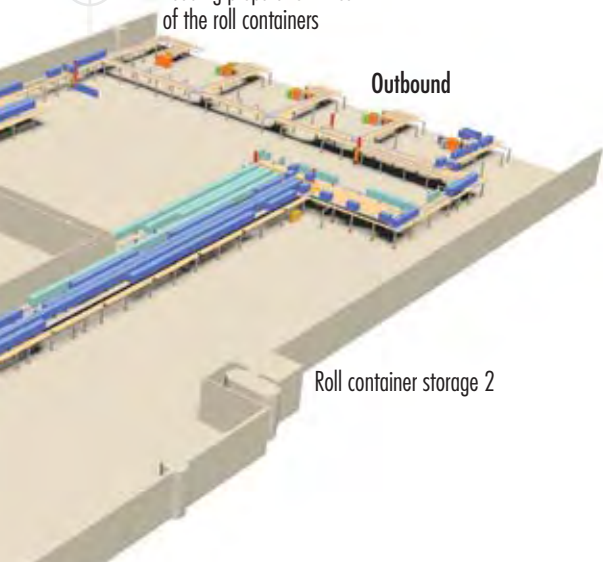
Gilgen Logistics has developed various types of roll containers for the Swiss Post. Since the first delivery in 1996, more than 50'000 roll containers have been supplied to the different centres.

### Conveying and storage systems for pallets

The pallet conveying systems supply logistics solutions for simple and complex material flow systems. Running horizontally or vertically, these systems can handle pallets weighing up to 1'500 kg each. The systems include such elements as chain conveyors, roller conveyors, turntables and transfer elements.

In this systems approach, high-performance shuttle cars with one, two or multiple-place conveyors are used. Conveying speeds of up to 5 m/s and intelligent electronics help ensure the optimum usage of available capacity. The range is further complemented by such additional system elements as pallet magazines, elevating units, automatic pallet-removal units and reloading devices. The conveying systems for pallets can be added to a high bay storage system with high efficient stacker cranes at any time.

Loading preparation lines of the roll containers



Outbound

Roll container storage 2





### Our References



LA POSTE

CHINA POST



- Swiss Post, letter centres, Zürich-Mülligen, Härkingen, Eclépens, Switzerland
- Swiss Post, parcel centres, Härkingen, Daillens, Frauenfeld, Switzerland
- Document Services AG, Zürich-Mülligen, Härkingen, Switzerland
- Swiss Post International, Basel, Switzerland
- Deutsche Post AG, International post centre, Frankfurt, Germany
- Solystic S.A.S., Gentilly Cedex, France
- Systems for:
  - Correos y Telégrafos, S.A., Spain
  - De Post, Belgium
  - La Poste, France
  - Deutsche Post AG, Germany
  - Itella, Finland
  - China Post, mail centre, Guangzhou, China

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