K.Handle Mail

OMS

Open Mail Handling System – advanced flats and rest mail sorting

The challenge

For postal service providers it is a tricky task to make flats sequencing a profitable business. A good solution needs to optimally support delivery preparation processes and – at the same time – has to fit into the overall sorting process.
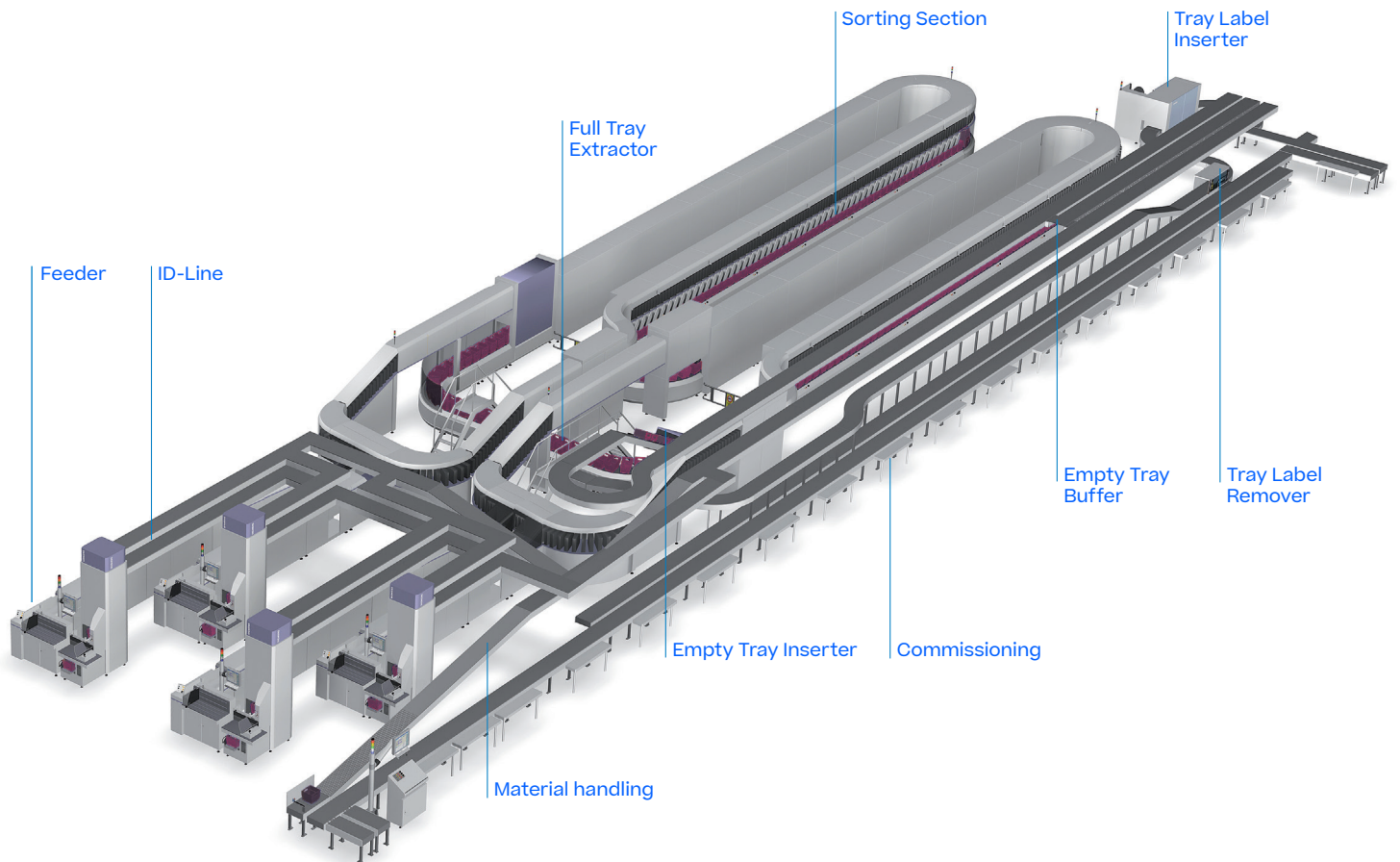
Our solution

The OMS is a smart system for processing flats and rest mail streams all the way up to small parcels and packages (up to 32 mm thick). Even open and plastic-wrapped magazines are no longer an issue. That means that a large proportion of mail can be sorted automatically with the OMS – right down to the carrier sequence. The mail is sorted directly into trays and no outlets have to be emptied. This is solidly supported by automatic full tray removal and a tray commissioning and buffering area at the machine's side.

The system architecture ensures that all items are processed without mechanical stress. This starts with multi-stage singulation at the feeders; continues with smooth, guided injection into the pocket carousels at low transfer velocities into and out of the stationary transfer pockets; and ends with the transfer to the tray.

Customer benefits

- Extremely large spectrum of processable items from 0.5 mm to 32 mm thick and up to a weight of 2 kg

- Excellent ergonomics for minimum operator workload

- High throughput and operational efficiency

- Advanced sorting accuracy and gentle mail handling

- Integrated material handling system

- Fingerprint software to avoid labelling and barcode printing

- Cost- and space-saving configurations

OMS with two Infeed Sections
(4 Feeder Modules)

Sorting Section

Tray Label Inserter

Full Tray Extractor

Feeder

ID-Line

Empty Tray Buffer

Tray Label Remover

Empty Tray Inserter

Commissioning

Material handling

Cost- and space-efficient sorting

The open architecture allows for a cost-efficient combination of throughput and sorting capability. The counter-rotating tray carousel, which determines the number of outlets, and the pocket carousels for ascertaining the throughput are basically independent sub-systems, linked by the stationary transfer pockets in the sorting section. The high-speed automatic flats feeder boasts an hourly capacity of up to 12,500 mail items per infeed line. Körber offers the OMS with two or four induction lines for a total nominal throughput of maximal 25,000 or 50,000 mail items per hour, respectively.

Full trays with perfect stacks

Full trays are important for minimizing handling and logistics costs. The OMS is equipped with a tray-filling level-measurement system on the tray carousel.

In combination with intelligent algorithms, trays are filled optimally. High-quality stacking is achieved through individual control of the transfer from the stationary transfer pockets into the trays.

Options

- (Pre-)barcode Reader
- Barcode Printer
- Barcode Verifier
- Fingerprint technology
- High-performance reading and coding system
- High-speed Label Applicator
- Tray Label Printer