



BAGGAGE HANDLING SOLUTIONS

Selex ES has broad experience working on airport processes for more than 15 years, gaining the technological expertise needed to satisfy all the handling automation and security needs of a modern airport.

Bad management of baggage flows is one of the greatest worries for airport operators: quickly re-uniting arriving passengers with all their bags is one of the top priorities for airport operators and efficient baggage handling systems are therefore essential.



Selex ES supports this need with a suite of products that integrates the management of both physical processes, including check-in, routing, screening, sorting and claiming, and information flows, such as transport flow control, trace & tracking, flight schedule reporting, packing list production and reconciliation.

BAGGAGE HANDLING SOLUTIONS

Selex ES offers reliable, efficient baggage handling solutions that include:

- Baggage check-in automation (check-in stations)
- Handling and management of arriving and departing baggage flows
- Baggage identification (bar code reading and RfId)
- HBS (Hold Baggage Screening) – baggage security
- Control system
- BHS (Baggage Handling System) – baggage routing for outbound flights
- EBS (Early Baggage Storing) – Storage of baggage checked-in early
- Baggage reclaim – Re-consignment of bags to arriving passengers
- Trace & Track (T&T) – Cargo manifest reporting and production.



MBHS - THE INNOVATIVE SOLUTION FOR BAGGAGE SORTING

Selex ES provides reliable baggage handling system solutions based on the MBHS® Multisorting Baggage Handling System, a cross-belt sorter designed specifically for baggage, that draws on the most effective and innovative technology available.

Reliability

All MBHS components have been designed and produced to assure maximum availability and operating consistency. Critical components are redundant. Each train of carts, for example, has a “head cell” with an on-board processor that manages all the carts in the train and their cross-belt cells independently and autonomously of other trains of carts. This means that if a cell fails, it can be taken out of service without affecting the others. Recovery operations to restore full system functionality can therefore be postponed until maintenance time windows.

Productivity

MBHS sorting capacity is in excess of 10,000 [Cells/h], making it possible to process baggage flows with very high throughput and productivity, as well as guaranteeing no stress or discomfort for operators and very low machine errors and jam rate, even during peak periods. Moreover, speed and operating throughput can be changed dynamically according to actual service needs. High sorting capacity and flexible speed control ensure an attractive return on investment for customers.

Flexibility

MBHS delivers optimum treatment for all kinds of luggage, from light, fragile items to heavy, bulky ones. It can sort all baggage that respects, and in some cases exceeds, the maximum dimensions established by IATA (Max size objects: 1200 x 950 x 800mm). Maximum weight is up to 60kg, or more than the maximum limit of 55kg established by IATA.

ELECTROMECHANICAL HANDLING PRODUCTS

The Selex ES catalogue comprises a huge range of handling products, including:

- Transport belt conveyors
- Queuing conveyors
- Merge conveyors
- Vertical and horizontal conveyors
- Pushers
- Baggage reclaim carousels.

MANAGEMENT SYSTEMS

Selex ES designs and develops advanced software systems that can manage the entire baggage flow inside airports and interface with the information systems used by airlines and other airport operators:

- Transport flow control systems
- Supervision systems
- Tracking and tracing systems
- Flight schedule information systems
- Modelling and simulation systems.

INTEGRATION OF RECOGNITION TECHNOLOGIES

MBHS and other handling products increase productivity and sorting accuracy by integrating advanced identification and recognition technologies.

These systems can be easily integrated on ED baggage handling solutions:

- Imaging readers (for objects in motion and with
- Varying depth of focus)
- Multidirectional bar code decoding systems (based
- On laser or imaging reading technologies)
- Multidirectional Rfid decoding systems
- Manual coding stations.

ENERGY SAVING

MBHS and all other baggage handling products have been designed and developed to save energy. Mechanical components, motors, power transmission systems, and control and management logic are devised and selected to minimise energy consumption and therefore maximise the return on investment of the solutions proposed.

MAINTAINABILITY, SECURITY AND ERGONOMICS

Selex ES systems are designed to provide easy, limited maintenance, high security and good ergonomics. Drawing on a highly specialised maintenance service that has been at work for many years in leading airport hubs, our engineers have the expertise to determine the needs of airport operators directly in the field and address them right from the machinery and system development phase.

A COMPREHENSIVE OFFERING

The innovative range of baggage handling products offered, combined with expertise in airport processes, make Selex ES the ideal partner for airport operators. Selex ES provides both turnkey solutions and systems that need integration with existing plants. Specialised baggage handling simulators are used to support customers in defining the most effective and best adapted solution for the specific airport in question.

Selex ES also has an offering in the Airport Security sector, with consolidated perimeter control systems, attendance logging and access control using biometric recognition techniques.