

CRISBAG® TOTE SYSTEM FOR AIRPORTS



BRINGING REDUNDANT, END-TO-END BAGGAGE HANDLING TO AIRPORTS

CrisBag® is a best-in-class tote-based baggage handling system. Each item of baggage remains in the same individually-controlled tote throughout the complete baggage handling process from check-in to early baggage storage, in-tote screening and transportation to discharge. This enables CrisBag to deliver 100% tracking and traceability at every stage of the baggage handling process. Innovative features, such as an adaptive tilt mechanism and a gearless drive system, help CrisBag to deliver ultra-low energy consumption, and to minimise maintenance

costs and spares, thereby obtaining the lowest OPEX in the market.

ADAPTIVE TILT FOR ON-THE-FLY DISCHARGE

The adaptive tilt mechanism automatically switches between static and dynamic tilt for baggage discharge. By monitoring upstream and downstream baggage flows, CrisBag selects dynamic tilt to discharge bags, on-the-fly, at a throughput of 3,000 bags per hour for peak capacity; or switches to static tilt, with lower throughput, less stress to components and lower energy consumption, during off-peak periods.

FEATURES

- High speed and capacity make CrisBag® one of the fastest baggage handling systems
- Compact and modular design with a wide range of standard modules for flexible configuration and smallest footprints
- All elements factory tested and quality guaranteed before shipping
- 'One bag per tote' and a unique 'one tote per section' concept
- In-tote screening eliminates the need to remove baggage from the tote
- Three tote sizes; standard and large totes running on same track

BENEFITS

- Fast, safe and flexible baggage handling from check-in to discharge
- 100% accurate track-and-trace of baggage at every stage of the handling process
- Eliminates tracking errors and additional handling during screening
- Compact and custom configuration for each airport using standard modules
- No more bag jams due to straps or other bag specifics



CRISBAG® IS A COMPREHENSIVE TOTE TRANSPORT SYSTEM FOR BAGGAGE HANDLING, DESIGNED FOR USE IN AIRPORTS, COMBINING BAGGAGE SORTATION, EARLY BAGGAGE STORAGE AND TRANSPORTATION IN ONE SYSTEM

The combination of standard modular elements into custom configurations supports the creation of ultra-compact systems with a minimum footprint and tight vertical integration. CrisBag can, for example, be installed immediately below a ceiling to free valuable floor-space and make best use of every centimeter of vertical space.

HIGH MODULARITY MEANS GREATER FLEXIBILITY

Using common components across different elements means that CrisBag is flexible enough to deliver systems ranging from the very small and simple, to extremely large and highly complex.

Each system can combine a mix of baggage handling elements, such as top- and side-loaders and dischargers; with straight, curved, merge and divert transport sections which can be installed at angles ranging from 0 to 15 degrees. The unique com-

bination of these standard modules allows CrisBag to be exactly configured to fit any airport. Efficiency is further increased by allowing empty totes to be stacked rather than recirculated.

IN-TOTE SCREENING TO EU STANDARD 3

In-tote screening allows airports to meet the new EU Standard 3 screening regulations. By eliminating the need to remove baggage from the tote during screening, CrisBag not only reduces screening times, but also ensures that each tote, and each item of baggage, is fully tracked and 100% traceable from check-in to discharge. Also footprint is reduced to a minimum, as no additional discharge and loading is required.

GREENER AND MORE EFFICIENT

Each CrisBag conveyor section is independently controlled and features a unique start/stop function which intelligently powers-off sections im-



BEUMER GROUP HAS REDEFINED ADVANCES IN THROUGHPUT WITH THE CRISBAG® INTEGRATED TOTE SYSTEM, WHICH ALLOWS AUTOMATED “IN-TOTE” SCANNING



mediately when not in use. This advanced technology not only reduces total energy consumption by 60%, compared to a conventional conveyor system, but also reduces maintenance costs. Tests on real-world installations show that each individual conveyor section is in operation for only about 10% of the total system run-time, which also reduces maintenance hours and minimises the need for replacement parts.

ULTRA-LOW MAINTENANCE AND PLCC COSTS

The modules within the CrisBag system are based on a standard format so that each module can be used in different parts of the system. This significantly reduces spares inventory, without compromising flexibility or performance.

The energy-efficient drive system uses motors which are controlled by frequency inverters. This eliminates the need for a gear box and also

CRISBAG® STANDARD MODULES

Baggage handling

- Side loader
- Top loader
- Adaptive discharge with dynamic and static tilt
- Manual handling station
- Service/walk-through

Basic transport

- High speed section
- Straight section
- Curved section
- Acceleration/deceleration section

Flow split/merge

- Diverter
- Merger
- 90° transfer
- Vertical sort

Storage

- Early baggage storage (EBS)
- Stacker/empty totes storage

CrisBag totes

- Standard baggage tote
- Large baggage tote
- Oversize baggage tote

means that the system is has no oil leaks. CrisBag further reduces spares inventory by eliminating the centre guide wheel and the pins on the underside of the tray.

The use of strong but lightweight components means that only one person is required to lift and move

each CrisBag section, which also reduces maintenance man-hours and costs.

The CrisBag is a proven technology with more than 50 km of the baggage handling system installed in various airports across three continents.

Specifications

Speed

- 0.5 - 10 m/sec (1.6 – 33 ft/sec)
- Nominal sorting: 2.3 m/sec (7.6 ft)

Capacity

- Dynamic discharge 3,000 totes/h
- Static discharge 1,800 totes/h

Baggage dimensions

- Minimum baggage size
Length: 150 mm (6 in)
Width: 50 mm (2 in)
Height: 50 mm (2 in)
Weight: 0.5 kg (1 lbs)
- Maximum baggage size
Length: 2100 mm (6.8 ft)
Width: 750 mm (2.5 ft)
Height: 550 mm (1.8 ft)
Weight: 75 kg (165 lbs)



Crisplant a/s

P.O. Pedersens Vej 10
DK-8200 Aarhus N
Phone: +45 87 41 41 41
airport@beumergroup.com
www.beumergroup.com