



# BEUMER AUTOVER® INDEPENDENT CARRIER SYSTEM

#### FAST, FLEXIBLE AND SAFE

The BEUMER autover® is an independent carrier system (ICS), in which the intelligent autoca® carrier, provides accurate, gentle and reliable baggage handling. The combination of the BEUMER -autover® passive rail system, with multiple independent BEUMER autoca®, allows each single item of baggage to be transported fast and carefully for delivery to its correct destination.

Each autoca® collects a single item of baggage from a loading station, typically after check-in, and transports it independently to its destination.

#### **FEATURES**

- Gentle sortation and transport of baggage
- One bag per autoca® increases traceability, security and 100% accurate track-and-trace of baggage at every stage of the handling process
- Contactless power and data transmission for high efficiency and low maintenance
- Can be directly linked to security systems for 100% traceability
- Virtually maintenance free rail system with no moving parts.

#### **BENEFITS**

- Fast, flexible and safe baggage handling from check-in to screening and discharge
- Reduces energy consumption by only using the required number of BEUMER autoca®
- Allows for easy and cost-effective extension
- Central service station for easy maintenance while system is in operation
- Autoca carriers handle various bag sizes, standard to OOG, as well as CrisBag® totes.

## INTELLIGENT CARRIER GENTLE HANDLING



The upper level management system assigns tasks to the individual autoca and also includes a SCADA solution to monitor and operate the system in a -graphical, real-time overview. The SCADA shows the currecnt position of each autoca®, also when moving, as well as its technical and operational status. The system also offers the functionality to change flight data for loaded bags in the -autover® system, as well as extended statistical values in a graphical, real-time overview.

#### INDIVIDUAL ROUTING AND DELIVERY

Each BEUMER autoca® is equipped with an on-board controller and drive system which allows it to move autonomously and quietly along the passive rail system. Dynamic routing means that each autoca® can perform different individual tasks. Each autoca can run with different speeds to optimise pace to the current traffic situation or to catch up with the autoca in front. The empty autoca® management is a basic routing

functionality, which ensures that an autoca® always will be available in time to fulfil operational demands.

#### NO WEAR AND TEAR

Contactless power and data transmission makes the BEUMER autover® rail system virtually maintenance free.

The rail system is completely passive, with no moving parts or active components except the BEUMER autoca® moving inside the rail system.

The autover system automatically generates maintenance calls and informs the operator to call autoca to the central service station.

#### ADAPTING TO CHANGES IN DEMAND

The inherent flexibility of the BEUMER autover® system and independently-controlled autoca® means that the number of autoca® can be adjusted to meet changing levels of demand. At peak operation, all autoca® can be deployed to deliver maximum capacity and

throughput. If baggage volumes are low, empty BEUMER autoca® can be moved to predefined parking areas to minimise power consumption.

#### **DESIGNED TO FIT**

BEUMER autover® can cover long distances, within and between terminals, and each system is configured in the smallest -possible floor-space. Steep inclines and declines up to 18°, merge and diverts with tight radii of 1.25 m, raised rails in fire protection areas and tunnels, are all features which can help reduce floor-space. Route management and the flexible rail system ensure that the system can be easily extended to meet future airport growth.







#### **ENHANCING AIRPORT SAFETY**

The BEUMER autover® system can also help airports to comply with the most stringent safety regulations by providing 100% track-and-trace of baggage at every stage of the handling process. At Montreal Airport, for example, autover® enhances the security process by uniquely linking each piece of baggage to the passenger. No item of baggage in the early baggage storage (EBS) system is released or transported to its final destination until both the baggage and the passenger have cleared all security checks.

At Nice Côte d'Azur Airport, the autoca® transport baggage to the airport's centralised checked baggage screening area, which consists of Standard 3 explosive-detection scanners. With one item of baggage per autoca®, the autover® system provides 100% tracking and traceability to ensure increased baggage handling security, efficiency and throughput.

Meanwhile, at Sheremetyevo Airport, an autover® system in a 2 km long tunnel will link the North and South Terminal Complex. The system will help keeping baggage connection time between terminals to a minimum whilst allowing each item of baggage to be safely processed and allocated to the correct make-up position.

### INSTALLED IN LEADING AIRPORTS WORLDWIDE

The BEUMER autover® intelligent baggage handling system operates in international airports, such as Dubai, Montreal, Münster/Osnabrück, Toulouse, Oujda, Gdansk and Nice Airport. The BEUMER autover® helps achieve a high return on investment by increasing operational efficiency whilst reducing energy and maintenance costs in addition to transit times.

#### **SPECIFICATIONS**

- Maximum speed: 10 m/s
- Maximum acceleration: 1.5 m/s
- > Loading speed: 0 2.3 m/s
- Loading capacity/feeding: 920 - 2,400 bags/h
- > Unloading speed: 0 2.3 m/s
- Unloading capacity/discharge:920 2,400 bags/h
- Curve radius: >= 1,250 mm /2,500 mm /5,000 mm.
  Other radii on special request
- Standard autoca with belt Maximum baggage size:
   Length: 1.000mm
   Width: 750mm
   Height: 500mm
- Extended autoca with belt
   Maximum baggage size:
   Length: 1.400mm
   Width: 750mm
   Height: 500mm
- OOG autocaMaximum baggage size:Length: 2.500mmWidth: 750mmHeight: 500mm
- Maximum baggage size may vary depending on system layout.



