About us

We specialize in designing, production, assembly, commissioning and service of the airport dedicated transport systems. We have all the essential qualifications and experience to execute professional and complex investments. We provide our Clients with optimal solutions, which increase the airport performance.
How we operate

Our solutions can be implemented at any airport, either new, extended or upgraded one. We provide optimal solutions at every stage of a project execution.

1. Analysing the Client’s needs at the stage of preliminary Baggage Handling System concept;
2. Developing a final design of the System complying with all the needs and requirements of the Client;
3. Manufacturing all the components of the Systems in Europe, in accordance with the highest quality and environmental standards;
4. Assembly and commissioning of the System in accordance with previously approved final designs, quality and safety norms;
5. Servicing, maintenance and repair of the implemented Baggage Handling System.

INTERNATIONAL OUTREACH

Our advanced and high-tech solutions have been acknowledged all over the world. We gradually implement Baggage Handling System in the countries of Europe, Africa, Asia and North America.
We are a company offering complex and innovative Baggage Handling Systems adapted to the individual Client's demand. It is already at the design phase that we are able to recognize the investor’s needs, which help us customize further solutions. From the very beginning of our business activity we have carried out both less demanding and highly complex systems.
Baggage handling systems

We offer a complex execution of Baggage Handling Systems investments. These high-tech systems, customized to the individual airport requirements, provide the highest security standards compliant with ECAC and TSA norms.
Check-in

Dimark’s check-in conveyors can be provided as a standard product or designed according to the Client’s requirements.

All conveyors meet ergonomic, environmental and functional standards ensuring user-friendly operation for both passengers and check-in personnel. The conveyor’s rail-based design enables quick and easy access to the maintenance space in emergency situations, like a stuck passport or a ticket that fell inside.

Additionally, we offer tilting devices which can be installed at the end of a dispatching conveyor to ensure a horizontal position of checked bags for further transport. The collecting conveyor is located behind the check-in and specialist algorithms are implemented to maximize space distribution to assure the highest possible system throughput. All covers are made of stainless steel.

Features of Dimark’s check-in conveyors:

- design flexibility;
- efficient check-in process;
- quick maintenance or replacement;
- easy loading of heavy baggage;
- high quality stainless steel finish;
- durable construction;

- integrated with other airport systems;
- easy removal of the front casing;
- possibility to pull out the whole check-in on a rail;
- can be integrated with self bag-drop;
- effortless removal of the bands enabling quick access to e.g. a document which fell in between the band and the casing.
Conveyors

Dimark’s conveyors are integrated with a baggage handling system and transport bags for subsequent security control procedures.

All conveyors have a heavy-duty bridge construction assuring high durability and low noise level. Conveyors have a channel shaped body. Designed for ease of maintenance, any key component can be removed and reassembled in less than 30 minutes.

All conveyors are equipped with a system protecting bags against damage during transport. Belts are carefully selected to assure proper adhesion preventing bags from rolling up or sliding. They are antistatic, low noise with an impregnated work surface for friction reduction.

Features of Dimark’s conveyors:

- durable construction;
- low noise level;
- low energy consumption;
- high load capacity;
- easy to maintain.
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**Curve conveyors**

Curve conveyors enable the baggage transport on bends up to 180 degrees.

Their advantage is ease of maintenance and swift belt repair or replacement. Belts used in Dimark’s curve conveyors are provided by leading manufacturers.

**Features of Dimark’s curve conveyors:**

- Durable construction;
- Quick service and repair;
- Low noise level;
- High load capacity;
- Wing structure;
- Leg only on one side – easy removal of the band;
- Easy assembly of new bands;
- Sets of bearings guarantee excellent lifecycle performance of the belt.
Vertisorter

Vertisorter enables directing the baggage flow to a lane located on another level.

This process is fast enough to separate an individual bag from a stream of bags. Vertisorter merges or divides two conveyors’ lanes into one without any disruption of the baggage flow. The compact structure allows for usage in tight spaces. Efficient cooling system enables continuous operation. It is characterized by the highest efficiency and operating speed on the market.

Features of Dimark’s vertisorter:

• smooth operation;
• high sort rate;
• noiseless operation;
• easy to maintain;
• durable construction;
• low energy consumption.
**Horizontal diverter**

Horizontal diverter enables transferring baggage to a perpendicular lane.

The diverter’s arm is equipped with a drive belt controlled by a separate drive and ensures a smooth baggage handling. The device is equipped with a soft start module. Diverter can be used to separate a single bag from a stream of bags. Very small dimensions and high rigidity enable its implementation into the existing BHS systems.

**Features of Dimark’s horizontal divider:**

- high sort rate;
- smooth baggage handling;
- design flexibility;
- durable construction.
ALL PARTS OF DIMARK’S DEVICES ARE MADE IN HOUSE
Dimark’s Tilt Tray Sorter was designed specifically for baggage handling systems. This is a high speed, closed-loop sorter that precisely and gently sorts baggage of different dimensions and shapes.

Along with the sorter Dimark delivers induction units, designed specifically to work with this and other sorters on the market. Thanks to the special roller coaster design the sorter can be easily implemented in existing terminal buildings, even with very limited space. Dynamic change of sorter line height enables sorting baggage on different levels in the sorting room.
Baggage carousels

In Dimark’s offer you will find a wide range of reclaim and make-up baggage carousels. Each unit is tailored to Client’s specification and building constraints.

Depending on the design and specification requirements, Dimark provides both flat and inclined carousels. Our baggage carousels assure easy assembly and maintenance due to the modular construction. A complete circuit consists of standard straight and curved sections allowing creating the desired shape of the carousel.

The carousel is equipped with a friction drive which enables very silent operation. Aluminium casted chain – very light and durable, ensures trouble-free operation. Thick slats, various colours available.

Features of Dimark’s baggage carousels:
- versatile design;
- construction assuring silent operation;
- durable structure;
- simple bag removal;
- high load capacity;
- reliable and resilient drive.
Early Baggage Storage

For transfer bags and checked in bags, hours before flight Dimark offers early baggage storage system (EBS).

Our solution ensures safe storage until flight time and enables easy access to stored baggage. Dimark’s Bag Deposit is efficient and accurate. Dimark’s sortation algorithms assure proper management of the bags, so that these are delivered to the airplane in accordance with flight schedule.

Early baggage storage provided by Dimark has modular design and allows to increase capacity of the system.
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Automation

SCADA

SCADA stands for Supervisory Control and Data Acquisition. This is a full-scale monitoring and control system.

It includes the following functions:
- tracking the status and indication of failures
- maintaining administrative information and statistics
- operational control of the routing system

To ensure the proper functioning of the SCADA system, Ethernet interfaces to the PLC (controllers), controlling the departure subsystems are necessary. The whole system can be remotely managed. It is possible to check the placement of bags and current status of conveyors. Integration with CTX allows display its status on SCADA screen. The operator has an overview of the events in the PLC network and the whole BHS system, as well as the ability to manually control every element in the system.

SAC

Dimark’s SAC is a computer system supporting the management of the luggage flow, control and sorting processes.

This solution is an integral part of the BHS (Baggage Handling System) and consists of the series of modules responsible for different areas of the baggage managing processes. All modules are integrated and share a common database. Once entered into the system, information will be available wherever one may need it. At the same time, the modular structure of the system guarantees adaptation to the current needs and rights of defined user groups.

It includes the following functions:
- flight Schedule Editing (Arrival and Departures)
- automated/manual chute allocation
- gantt view for chute allocation
- drag & drop function
- on-line change
- bag flow information
- viewing all bags information
- tracking information
- time of mile stone registration in system (on check-in, CTX, sorter, manual coding, sorter, chute, truck)
- multi stations operation
- system is able to work on many workstation at the same time
- analysis and reporting of system operations
- graphic charts and text reports
Conveyors are controlled by PLC controllers using advanced bus communication. Communication protocols (CAN/ProfiBus/ASI/ProfiNet or EtherCat) ensure short transmission times.

In addition to the basic transportation functions, each subsystem offers additional functions, e.g.:

- control of shutters/fire doors
- energy efficiency
- matrix control
- tracking and updating
- failure processing: emergency stop, thermal overload, baggage jam alarm, errors due to the timeout, PPI/encoder errors
- fire alarm
- interface interaction with SCADA and SAC
- interface interaction with other equipment, like x-ray apparatus and BMS

Control System Equipment / PLC control system

Each subsystem offers additional functions, e.g.:

1. Check & operation
2. Security control
3. Handling & Sorting
4. Baggage on the chute
5. Print List & check bag tags
6. Ins & Loading bags
7. Today Logg
8. Carring to object

Control System Equipment / Manual Coding Station

The operator working at the manual coding station can scan or enter the information necessary for baggage sorting. A handheld scanner, connected to the SAC workstation, with integrated (built-in) keyboard scans and inputs tag and carousel numbers from MCS.
Why Dimark?

EXPERIENCE
We commenced our business activity in 1992. Over the years we gained the experience that now is a warranty of the highest quality service employing optimal technology customized to the needs of every Client.

SOLUTIONS OF INTERNATIONAL STANDARD
Presently we offer our Clients high-tech, state-of-the-art solutions that meet top international requirements of the industry.

TRUSTED SUPPLIERS AND HIGH QUALITY
We rely on dependable and well operating supply chains, thanks to which we guarantee the highest quality of offered products. Selecting appropriate materials means maximal durability, as well as reliable and easy maintenance of our appliances at operation.

NEW TECHNOLOGIES
Our company owns a comprehensive research and development department (R&D) at which regular tests and monitoring are carried out. As a result, we not only continually upgrade and improve our systems, but also introduce the market with new, more advanced products.