PROJECT FACTS

BARCELONA AIRPORT

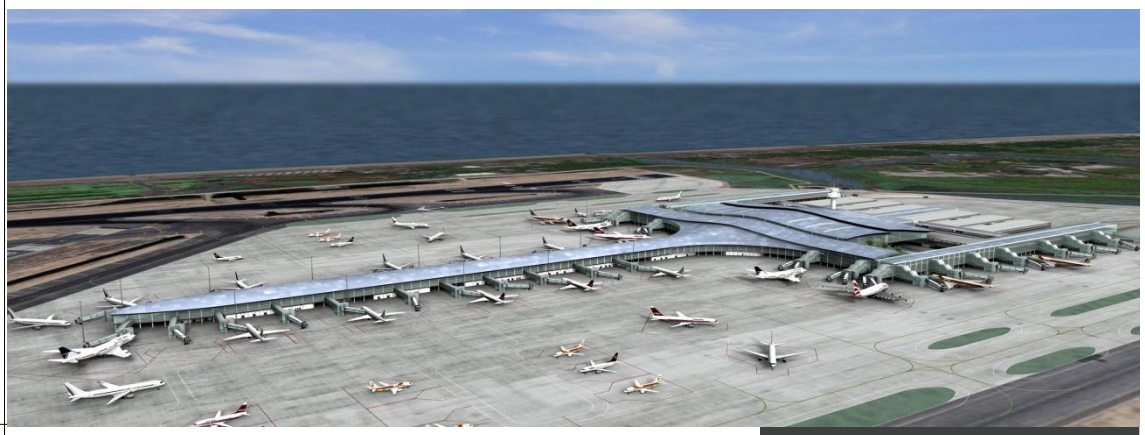
EL PRAT, SPAIN

Terminal 1, Barcelona

The Master Plan for Barcelona Airport included the construction of a new terminal (Terminal 1) located between the existing runways and the new parallel one. This new Terminal was designed by Ricardo Bofill, and its main aim is to adapt to the occurred air traffic growth (8% anually). In this way, the airport is able to grow and it will be able to handle 55 million passengers per year (25 million in 2006). After this amplification, the airport will operate 90 flights per hour instead of the present 62.

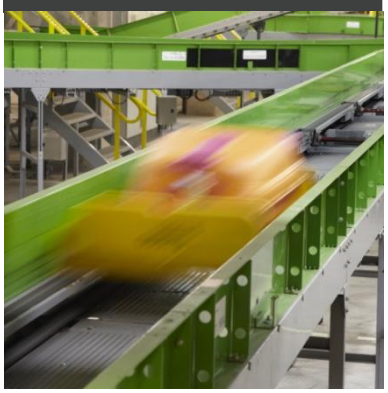
The baggage handling system is based on DCV technology (TUBTRAX) for the transportation and sortation of departing baggage from check-in desks and transfer inductions to 20 make-up carousels of the tilted TRIPLANAR type. Standard baggage tubs are used for carrying normal bags while oversize baggage is transported with conveyor belts.
In addition to the 140 desks in the departure hall, and 14 check-in desks in the car park there are also input points of baggage checked-in at the city's train station and the cruise terminal. Transfer baggage is introduced on 6 transfer quays.

A multi-level in-tub Hold Baggage Screening process is integrated in the system. Early baggage is temporarily stored in an energy-efficient warehouse, served by stacker cranes, allowing individual access to each bag. Sortation takes place by means of two tilt-tray sorters as well as a high-speed TUBTRAX sorter to which time critical baggage is conveyed at a speed of 6 m/s. Arrival baggage is delivered to 14 TRIPLANAR carousels via multiple infeeds.
The baggage handling system is also prepared for a potential future connection with one or more remote satellites. The system has the highest industry safety level for both passengers and operational staff.



Aena

Baggage Handling



VanDerLande INDUSTRIES

PROJECT FACTS & FIGURES

BARCELONA AIRPORT

TERMINAL 1

www.aena.es

IATA code:BCN
ICAO Code: LEBL

Contract

Project milestones	Technical project, July 2002 Engineering order, September 2004 Final completion, April 2009
Contract value (€)	107 + 8 million
Project organisation	Consortium Vanderlande – ABB – Dragados (headed by Vanderlande Industries)

System

Capacity (bph)	10,500
Sorting	TUBTRAX and Tilt Tray Sorters (2)
Carrier	Standard baggage tub, screenable and stackable for efficient empty tub storage
Check-in	140 + 4 (OOG) + 14 (Parking) + 8 (Airshuttle)
Cruise-ship input	2
Trainstation input	1
Transfer	6 inputs
Make-up	20 Inclined carousels (TRIPLANAR)
Reclaim	14 + 1 (Airshuttle) Inclined carousels (TRIPLANAR)
Identification	Barcode reading and RF (on tubs)
Early Bag Storage	2 x 750 rack storage positions with 14 cranes in total
Screening	L1: 12 EDS L2: Operator L3: 4 CTX
Out Of Gauge	Separate conveyor belts 4 + 2 (Arrivals) Discontinuous hoist

BAGGAGE HANDLING SYSTEMS
www.vanderlande.com