SIEMENS

Solutions for Airports

"Best Airport" in Spain is safeguarded by world-class technology

Siemens has supplied the safety and security system for the largest infrastructure project created in Catalonia in the last 20 years.

The Terminal 1 at Barcelona International Airport was inaugurated in June 2009, consolidating Barcelona's place amongst the most important air hubs in Europe. Airport solutions from Siemens took care of all the safety and security aspects in the entire airport terminal.

Flights all over the world
The Barcelona International Airport (Barcelona El Prat Airport), located 14 kilometers southwest of the center of Barcelona, is the second largest airport in Spain after Madrid Barajas Airport.

In 2011, nearly 34.5 million passengers used Barcelona International Airport, making it the 9th busiest airport in Europe. The airport mainly serves domestic, European and North African destinations, also having flights to Southeast Asia, Latin America and North America.

The Spanish airport has been named "Best Airport in Southern Europe" at the 2011 World Airport Awards.

Large, bright and highly regarded Terminal 1
One of the largest civil engineering projects ever undertaken in Europe, Terminal 1 is an extremely functional complex in terms of logistics, combining advanced technology and passenger service.

The architecture combines a multicultural character with the luminosity and environmental warmth of Mediterranean style, with natural light a feature in all passenger areas. The result is a communications hub and user-friendly service center that blends with the surrounding areas of ecological interest with minimal impact.

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Safe, secure and efficient solutions

The Terminal 1 complex is based around three elements: the passenger processing building which comprises the check-in, baggage reclaim and airside shopping areas; two lateral docks and one longitudinal dock for passenger boarding; and a lobby where the various transport systems come together.

At the security points controlling entry to the passenger departure lounge, Siemens installed walk-through scanners with pulse induction, multi-zone, metal detection that locates weapons and devices in footwear – therefore eliminating the irritation of passengers having to remove their shoes. At the automatic luggage system, Siemens installed scanning equipment for secondary luggage inspection. Siemens was also commissioned to install the Sinteso™ fire safety system within the terminal. The centralized system includes 24 fire control panels, 27,000 smoke detectors, 1,900 manual call points, 70 aspirating smoke detectors and the video wall in the security control room.

Increasing airport capacity

The new terminal has an aircraft ramp of 600,000 m^2 and facilities include 168 check-in counters, 50 jetways and 15 baggage carousels. With the opening of the new terminal, the airport has increased the number of passengers it is capable of handling from 30.2 million passengers to 55 million passengers per year. The expansion has brought about a 300% increase in passenger areas, airbridges and baggage carousels and a 1000% increase in operational areas.

The commercial service area is now four times greater and there are also improved public transport services, with transitions between different modes now being short and straightforward. With regard to air movements, the airport has increased its capacity from 52 operations per hour in 2004 to a potential maximum of 90 operations per hour. A further expansion is planned to be finished by 2012, with a new satellite terminal, which will raise the capacity to 70 million passengers annually.

Highlights

- 24 Sinteso fire control panels
- 27,000 smoke detectors
- 70 aspirating smoke detectors
- 1,900 manual call points
- MK8000 OPC server
- Video surveillance: control room video walls
- Passenger and luggage scanning systems
- Terminal and airfield lighting