

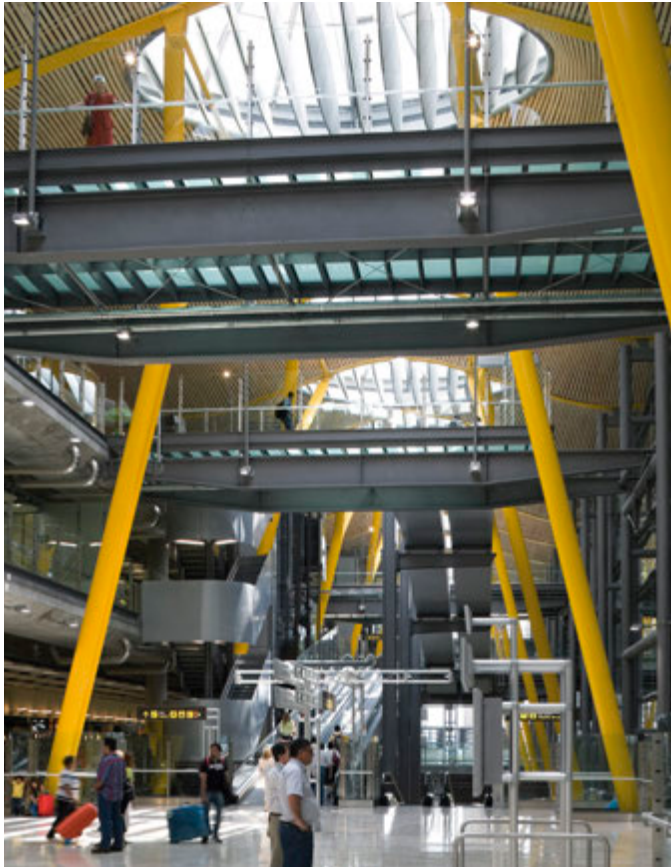


Barajas Airport

Madrid, Spain

In architectural terms they designed a wonderful building that makes an impact on everybody and created a truly functional and efficient airport that facilitates the flow of passengers through the building.

Jose Manuel Hesse Martin, Plan Barajas Director



Place
Madrid Airport, Spain

Date
1997-2005

Client
AENA

Cost
£448 million

Areas:
Total
1,158,000m²
New Terminal Building
470,000m²
Satellite
315,000m²

Co-Architects
Estudio Lamela

Structural Engineer
Anthony Hunt Associates/
TPS with OTEP/HCA

Facade Engineer
Arup

Landscape Architect
dosAdos

Lighting Consultant
Arup / Speirs Major

Main Contractor
Terminal UTE; Satellite
UTE; parking; DRAGADOS;
manutention bagages
Siemens Dematic

Awards

2008
Airport Council International Award for Best European Airport
RIBA Stirling Prize
Istructe Award for Commercial or Retail Structures
AIA/UK Excellence in Design Award

2006
RIBA European Award

2005
RIBA Airport Award

The terminal, which is the biggest in Spain, was commissioned to enable Barajas International Airport to compete with major hub airports within Europe. The core building comprises a sequence of parallel spaces separated by a linear block allowing daylight to penetrate deep into the interior. The same form is applied to the satellite, which is comprised of two linear blocks, one for passport control and the other containing the gates.

The bamboo linear roof structure is connected above by a chain of roof lights, permitting maximum flexibility in the arrangement of accommodation on each of the floors. This enables the building to be expanded in phases. The new terminal has a metro, rail station and landside transit link to the existing terminals as well as a transit system linking the core terminal with the satellite.

Pedestrian circulation to and from the parking area is concentrated along the face of the parking structure, creating an animated façade opposite the terminal. The layout of the arrivals hall creates clear and separate routes to the various modes of ground transportation, giving equal weight to public and private transport. The arrivals and departures forecourts as well as the train and metro station are covered by a standard module of the roof, which thereby encompasses the entire sequence of activities from drop-off to departure gate.

Environmental measures, aimed at significantly reducing energy consumption, include a stratified cooling system, displacement ventilation supply to the piers, low level air supply to all other passenger areas, extensive shading to the facades and roof lights, zoned lighting and the collection of rainwater to irrigate the landscape.