

Structural type Client Scope Architect

Mexico City's New International Airport

Mexico City / 2016

steel structure and space frame Dragados & Ferrovia & ICA tender design Foster + Partners



The proposal by the team formed by Foster + Partners, FR-EE and NACO was the winner of the international competition carried out in 2014 to design Mexico City's New International Airport. The size of the terminals and their innovative configuration represent a landmark in airport design. One of its distinctive elements is the continuous and light enclosure that combines the perimeter walls, the roof and the supports, creating a flowing and full of light space evocative of flight.

This lightweight structure combining steel and glass is ideal for the low bearing capacity of the ground, thus minimizing the environmental impact of the construction. It has been designed to be built with inexpensive repetitive modules that do not require temporary propping even for the maximum spans rising up to 170 m. The 2.50 m static height space frame has a shape that follows the permanent loads antifunicular and is composed by 675,000 steel bars and 125,000 spherical knots. The bars are circular tubes about 3.0 m length, and the knots are prepared to insert the threaded terminals of the bars. In spite of the significant dimensions of the building, expansion joints have not been included in the structure, therefore simplifying its use and maintenance.



