

El Dorado International Airport



Location:
Bogota, Colombia

Construction Cost:
\$150 Million

New Air Cargo Facility



Ross & Baruzzini is responsible for the design of MEP/FP/IT/Security and Telecommunications systems for a new Air Cargo Facility at El Nuevo Dorado International Airport in Bogotá Colombia. The entire project was designed to meet the strictest local seismic requirements and a fast track system was utilized for construction with a very tight deadline. The entire construction is to be completed in less than seven months. The project, once completed, will be the most modern and the largest air cargo facility in the country.

The project includes several facilities with variety of occupancies. These facilities include:

- New state of the art cargo distribution building (warehouse occupancy) of approximately 400,000 square feet with 40 ft clear ceiling heights and airside and landside access
- Mezzanine offices of approximately 40,000 square feet
- Three (3), three story office buildings of 4,000 square feet each for Customer Service Units (CSU's)
- A four story office tower of 70,000 square feet

The project electrical scope includes 34.5 kv primary electrical distribution system, 11 MVA of double ended unit substations, three back up emergency generators ranging from 250 to 2000 kw.

The mechanical scope of work included 400 tons of roof mounted air-cooled chiller capacity for the cargo facility, and 140 tons of air-cooled chiller capacity for air conditioning. A state of the art energy efficient Variable Air Volume (VAV) system with Direct Digital Controls (DDC) was utilized for the office areas.

The plumbing and fire protection work scope posed a special challenge as the water flow rates and pressures from the city mains were not sufficient for the demand, therefore two 450,000 gallon underground cisterns were provided for domestic water and fire protection system, with several pumping stations that fed two separate loop systems from which the water and fire mains are tapped at each facility.