

BEIJING AIRPORT ENTERS TOP TEN AIRPORTS IN THE WORLD



As Beijing prepares to host the Olympics Games 2008 so does their International Airport with the completion of the new terminal 3 building which will allow 90 million passengers through the capital. With their extensive track record of protecting steel in the airport market against the environmental elements, International Protective Coatings was the ideal coatings company to protect the 50,000 tons of steel used in this mammoth project.

With China's entry into the World Trade Organisation and Beijing hosting the Olympic Games, a new

runway and accompanying terminal was needed at the Beijing Capital International Airport to handle the growing number of people and planes passing through the capital's airport.

Architects Foster and Partners along with Arup won the contract in November 2003 and had a completion date of December 2007, which would leave enough time for the building to be commissioned before the start of the Olympics, and which makes this expansion the single largest project as well as the fastest ever built.

As the gateway to the city it was vitally important that the design of the terminal gave the airport a unique appearance whilst remaining traditional to the Chinese culture. Located between the existing eastern runway and the newly built third runway the terminal covers a floor area of more than half a million square meters (5,400,000 square feet) and has a roof stretching 790 meters (2,600 feet) wide.

The roof is scattered with raised triangles, which have been likened to the scales on a dragon's back, which act as windows to let in natural daylight. At night the glow of yellow, orange and red lights can be seen

through the roof, outlining the terminal's silhouette, all associated around the world with China.

With a successful track record of supplying protective coatings to the airport market International Protective Coatings secured the project to supply protective coatings for the curtain wall steel work, steel purling for the roofing, steel columns and the air bridge steelwork.

A system of Interzinc® 52 (75µm), Intergard® 475HS (125µm) and Interfine® 878 (50µm) was supplied and fabricated by HuNingGangJi, Beijing 3J, Zhejiang Dongnan and Zhejiang JingGong.



Photo courtesy of Nigel Young/Foster + Partners

INTERNATIONAL PROTECTIVE COATINGS WAS THE IDEAL COATINGS COMPANY TO PROTECT THE 50,000 TONS OF STEEL USED IN THIS MAMMOTH PROJECT

As a new construction project, the zinc rich primer Interzinc 52 provides excellent galvanic corrosion protection via the use of metallic zinc pigmentation. International Protective Coatings supplied approximately 75,000 litres (20,000 gallons).

As the colour of the roof was the Chinese traditional red, a high, long term cosmetic appearance was vital for this project. It was for this reason that Davis Langdon Schumann Smith recommended to Foster and Partners that an acrylic polysiloxane should be applied as the top coat. To deliver

on this requirement International Protective Coatings supplied 35,000 litres (9,000 gallons) of Interfine 878. As an inorganic based material this high performance, high colour and gloss topcoat is designed to be applied last in a protective coatings specification. Interfine acrylic polysiloxane contains no free isocyanate and can be applied offsite to avoid the high cost of applying a traditional site coat, often needed when using polyurethane. Protecting from the detrimental effects caused by natural sunlight whilst maintaining the gloss and colour properties

made Interfine 878 the most suitable topcoat.

As Beijing Capital International Airport prepares for the Olympic Games, International Protective Coatings has been there to provide real solutions for some of the other Olympic venues:

- Beijing Olympic National Swimming Centre
- Beijing Olympic Convention Centre
- Qingdao Sea Boat Centre
- Beijing Olympic National Indoor Stadium