



THE BEIJING NATIONAL STADIUM

Area: **254,600 square meters**
 Track Provider: **Mondo Spa**
 Height: **69,2 meters**
 Start date of construction: **December 24, 2003**
 Cost of project: **\$423 million**
 Structural engineering: **Arup**
 Number of workers: **17,000**
 Steel used: **44,000 tons**
 Capacity: **80,000/91,000 (2008 Olympic games)**

(China)

THERE ARE MANY REASONS TO REMEMBER THE 2008 OLYMPIC GAMES, AND ONE OF THESE IS UNDOUBTEDLY THE IMPRESSIVE EVENTS BROADCASTED TO AUDIENCES AROUND THE WORLD FROM THE OLYMPIC STADIUM IN BEIJING, A BUILDING UNIVERSALLY DUBBED WITH THE NICKNAME "THE BIRD'S NEST".

AN ARCHITECTURAL MIRACLE

The reason for the name immediately strikes the eye : an intricate system of ties and a complex steel structure makes the building look like a huge nest, that can hold up to 91,000 spectators and has one of the world's fastest athletic tracks. The history of this architectural miracle began with an announcement issued on December 19, 2002. On March 26, 2003 a team of international experts examined the proposals coming from all over the world. In April, the winner was announced: the swiss **Herzog & De Meuron** firm, which along with **Arup Sport** and the **China Architecture Design & Research Group** would deliver the full project in December 2007. Everything was perfect, up to the last details. On June 28, 2008 a grand opening ceremony drew the curtain on this colossal stage that would for about a month put the Chinese dragon under the worlds' astonished eyes.

THE MYTH

Creating a building of this magnitude was not an easy task. In China everything is a symbol and a reference to the past and the National Stadium in Beijing was no different. The circular shape of the building represents Heaven, and the intricate pattern was inspired by traditional Chinese "crazed" pottery, which tourists can buy in the Beijing markets. From a distance this building looks like a colossal ship, but also like an immense nest and in which our minds can imagine China as a large bird that has just taken flight.

THE ARCHITECTURE

At the beginning the stadium was designed to accommodate 80,000 spectators. Then the capacity was increased to 91,000 seats out of which 11,000



were temporary placed on the terrace of the top floor in front of the restaurants. To build the stadium, it took 17,000 workers and 44,000 tons of steel for the structure that rises six floors above the ground. Because of Beijing's geological characteristics, the stadium was also conceived to withstand major earthquakes and has become structurally even more secure since it was decided not to proceed with a roof because of its cost. "Our goal was to create an architectural building that could be utilized after the 2008 Olympics," said the Herzog & De Meuron architect. To further celebrate the work a film was produced that narrates all the stages of the stadium construction.

THE SPORT

If the architectural study was important, we have to keep in mind that the Bird's Nest is first and foremost a stadium and that for athletes competing in the race what matters more than anything is their performance result. The track which runs rapidly under the athletes' feet was designed by Mondo. Mondotrack FTX, is a highly innovative material, resulting from applied research and decades of knowledge gained in working with the eight previous Olympic Games.. This time to make things more complicated, there were two fundamental characteristics that the management of the Games had imposed. The final building had to be: Hi-Tech with a strong propensity for ecology, since the Beijing Olympics were the first in which there was talk of "green" Olympics. The final track met those requirements in full. The track is "hi-tech" because it was engineered according to the biomechanics principles and applied engineering. It is also "green" because it was made with environmentally friendly materials and a production cycle that respects the environment at every stage of production.

THE RESULTS

The athletes' performances excited the whole world. On August 24th the Olympics came to an end, but the hearts were still warm. **Lamine Diack**, President of the IAAF (International Association of Athletics Federations) excitedly stated: "The Beijing Olympic Games proved again why the IAAF has partnered with Mondo since 1987 and will continue to do so until 2019. Mondo stands for excellence in track surfaces, and we all marvelled at the achievements of the athletes. In addition to the last nine Olympics, Mondo has provided tracks for numerous IAAF World Championships where more than 230 world records have been set, which is an amazing achievement. "



