



SPECIALIZED ATHLETIC CENTER IN ANTEQUERA

Installation of the Structure and Panels: **two specialized workers + six assistants. 35 Days**

Hydraulic System: **three specialized workers + two laborers. 10 Days**

Installation of the Flooring: **two specialized workers + two laborers. 18 Days**

Track Painting and Signage: **two qualified workers + one laborer. 7 days**

Mechanical Equipment used: **One crane with telescopic arm and three lifters**

Sport Architecture
(Spain)

ANTEQUERA IS A TRUE CROSSROADS AND HISTORICAL MEETING POINT OF CIVILIZATIONS AND CULTURES; A CHARACTERISTIC THAT HAS FACILITATED THE STEADY GROWTH IN THE WAKE OF AN ILLUSTRIOUS PAST. THE "SPECIALIZED ATHLETIC CENTER" IS THE LATEST EXAMPLE.

The "Specialized Athletic Center" which was inaugurated in March 2011, is **the only facility in Andalusia that can boast about having an indoor hydraulically banked track**. In fact, there are only 15 tracks, worldwide, that possess similar characteristics. Antequera is possibly one of the most ancient and important medium size cities in southern Spain. "**Anticaria**" (Ancient/Old City) **was the name given, over two thousand years ago, by the Romans** when they built the civitas on top of a pre-existing village. It survived the passage of time due its constant renewal. The favorable position, between the fertile Vega Valley and the spectacular Sierra del Torcal, plus its close proximity to the great cities of Southern Spain, makes Antequera a "meeting point city". This is its main and most interesting trait. That is how, **Jose Segui Perez, an expert in the field, describes it. He is the architect and the designer who, in 1987 and 2009, worked on the general planning of Granada, Cordova, Baena, Nerja, Jaen and, obviously, Antequera.**

AN ARCHITECTURAL SYMBOL

Segui believes in the "power of a place", which is the ability of the landscape and the most meaningful places to effectively represent not only the esthetics but also the identity of a city. **One of these architectural symbols, the facility dedicated to field and track, originated from his desk.**

The project was submitted for public tender by the Ministry of Tourism, Commerce and Sport of the Andalucía Regional Government. The intent was to build facilities that would become a model and reference point for both, national and international field and track organizations. "We were lucky to have won this competition that pushed us to produce a very detailed analysis of the project including the lighting, both natural and artificial, and the functionality of the structure", explains the Director of the Professional Group "Estudio Segui" who believes that the most important part of the design



was the selection of the track. **“To satisfy the requirements we picked the Mondo hydraulic track system, that ensures the perfect track set up, fully satisfying the highest standards demanded by the top class athletes”.**

THE PROJECT

The track and field dedicated facility, built by a temporary association of businesses (UTE) put together by Sacyr and Tecysu, has an 11,759 sq. m. indoor surface. **It incorporates a 200m track plus the space in the center for other field and track disciplines such as long jump, pole vault and shot put and a large warm-up.** **One of the main characteristics of the track is its hydraulic system that permits the curved areas to be raised to a height of 1.05m.** This feature makes the track a lot more versatile. This is the second track of this kind in Spain; the other one can be found in the Valencia “Luis Puig” velodrome.

The Antequera facility is also equipped with permanent spectator stands capable of holding 2,000 people. Underneath the stands the locker rooms, the gym, the medical facilities and, among others, the trainer rooms can be found. **The most significant feature of this sport center certainly is its track.** In fact, the **Mondotrack FTX 13mm surface is the same that was used for the Beijing Olympic Games where five world records were set. It is also the same type of surface that will be used at the 2012 London Olympic Games.**

On an identical surface installed in the Barcelona Olympic Stadium, 22 national records, seven championship records, 13 junior European records and 3-year world records were set during the 2010 European Championship.

Jose Segui explains that the preparation activities that have preceded the complex installation of the track **“have been designed and planned in a close relationship with Mondo”**, to ensure that all assembly requirements would be met”. According to Antonio Escobosa, Project Manager, the coordination with Mondo’s personnel has been fundamental because of the extreme precision needed during the setting of the foundation for the track. **“From the very beginning, we were required to ensure a very high accurate construction of the track because the demanded tolerance in the curves was +/- 5mm.** This forced us to constantly monitor the framework and the concrete structure of the track using precision topography. This is the reason why, according to Escobosa, special concrete was used in order to reduce the volume variations that are generated naturally after the concrete hardens.

The track was built in a period of just over a month and a half and 25 people were needed to build it said Escobosa. Previously, and in less than two years, the entire facility was built, while the engineering work for the athletics track required about one month to complete (the foundation for the track, underground hydraulics, the pit for the jumping event, etc.). Seguí remembers the various problems that emerged during the design phase for the interior facility. “In consideration of the presentation of the four facades of the external structure of the facility, we thought of adopting a different opening system for each side. Thus, we managed to secure a natural and homogeneous illumination inside without having to resort to artificial illumination. Consequently, **the system allows for substantial savings on the energy costs for the maintenance and use of the building itself”.**

The architect expresses his satisfaction over the comments received upon completion of the facility, especially those from the athletes. “Avoiding seam issues in dismountable tracks, or significantly improving contact between track and athlete, leads to an incredible improvement with respect to the traditional athletics tracks”.

The result, says Escobosa, is an example of the level of Mondo’s innovation and of the quality of its facilities. “Innovation is determined especially by the great use versatility that enables a building such as a specialized facility for track and field in Antequera, for instance and with little time difference between events, a European track and field championship event and a handball match in the Asobal League”. Previously, the installation of an indoor athletics track commanded an enormous cost in terms of assembly while requiring a very long time to complete, said Escobosa, while **“now with this type of track, problems of this type do not exist”.** Finally, this is highlighted by the quality, **“because the precision of the hydraulic system is extremely high, seeing as it is also controlled by a latest generation software system”.**





