

Distance measurements in record time

February 2000 marked the dress rehearsal, with 1250 athletes competing at the Australian Open Athletics Championships held in the newly-built Olympic stadium. Leica Geosystems total stations were deployed to measure jumping and throwing distances in Sydney's new "Stadium Australia". At the meeting, athletes were for the first time able to realistically assess sporting conditions in an arena with a seating capacity of 110,000. The stadium managers also made good use of this opportunity to test the efficiency of proceedings, and see how state-of-the-art measurement and transmission technologies could work together.



Foto: David Madison/Stone

To measure athletes' jumps and distances, SwatchTiming has deployed, for the very first time Down Under, a new generation of laser surveying instruments developed by Leica Geosystems, Heerbrugg, Switzerland. These instruments focus automatically on the exact landing point and measure the distance at the speed of light. One Australian discus judge said, "With this new laser equipment we were able to determine the distances significantly faster, more accurately and more reliably. Now we won't have to worry about sagging tape

measures and unclear calls any more!"

"Just a few seconds after the measurement had been taken, our jury had the result in digital form to the nearest centimetre." This will please television audiences in September – and during the finals we are talking about more than a billion people following the competitions on their screens.

A bold sports arena in the huge Olympia Park

Conditions in Stadium Australia are ideal for TV

transmissions: maximum overhead coverage is possible and cameras can be set up in the optimum locations for all the different types of event. For example, the glass panels in the two curved roofs over the side stands have four different layers of tinting, ensuring that the light and colour temperature are balanced for TV transmissions and that spectators are protected through filtering of ultra-violet light. Lines have been laid in the stands, enabling individual spectators in 85,000 seats to be connected to electronic equipment. Stadium visitors are struck by the excellent view of the various competition areas which are available from every seat position. On the intermediate tiers, which are conveniently accessible, there are areas specially designed to accommodate wheelchairs, not just for the Paralympic Games in the second half of October, but for all events held in Stadium Australia.

Sydney's Olympic Park is twenty kilometres from the city centre. Over the last ten years, additional large training centres and competition areas for tennis, basketball, hockey and track athletics have simultaneously been erected around Stadium Australia on the same site in Homebush Bay. As well as the covered SuperDome with its 20,000 seats for sporting and entertainment events, the Olympia Park's Aquatic Centre is also very impressive. It is one of the largest covered swimming pool and water sports complexes in the world. World records fell here even before the Olympic Games.



A gold in architecture before the first Olympic gold

Both Australian athletes and spectators were thrilled by the atmosphere in this projecting stadium building, which has already had architectural and ecological prizes conferred on it. Stadium Australia could also turn out to be a sporting venue where new records are broken – not just in running but also in the Long Jump, High Jump, Pole Vault and Triple Jump, the javelin, hammer and discus disciplines, the shot-put, heptathlon and decathlon. The first major Olympic test before the Summer Games takes place in the middle of August when the national Olympic selections are announced in Stadium Australia. Athletes from Australia and other countries as well will also be pushing themselves to the limit here once they have overcome their jet lag. When the Olympic flame is lit in Stadium Australia in the

second half of September it will spur them on to yet greater feats.

Stf

Stadium Australia is the most state-of-the-art athletics competition venue of our time. It can seat 110,000 spectators. The enormous roofs over the side stands are covered with four layers of tinted glass panels aimed at optimising the television picture quality.



Setting sights on the 2000 summer Olympics at Stadium Australia: SwatchTiming keeps track of times and distances, with help from Leica Geosystems instruments.