

South Korea's Tiger:

Getting Seoul in Shape for the World Cup



Every four years we gather with friends and family to cheer on one of 32 teams. Some call it football and others, soccer. Either way, the World Cup has become a 24-hour-a-day, seven-day-a-week viewing phenomenon around the world.

But what happens in the four years between events? The revamping of transportation systems and infrastructure. The remodeling of hotels and restaurants. And the construction of parks and stadiums to accommodate the millions of fans fortunate enough to witness a small piece of sports history. It takes millions of dollars and thousands of people working together for years to ensure the success of an event of this magnitude.

One national company with fewer than 100 employees earned an important role in the 2002 World Cup games co-hosted by Korea and Japan in 2002. Years before the event, Tiger Corporation of Seoul, South Korea, competed against other manufacturers for the right to design, cut, assemble, test and install the mammoth structures shielding the football/soccer stadiums. The company constructed overhead stadium structures in the city of Seoul and on Jeju Island to protect fans from all the elements scoffed at by the game's players — wind, rain and sun.

Tiger manufactures tension structures, both skeleton- (supported by a frame) and air-membrane (tension) types. You can find these structures ascending gracefully over stadiums, shopping centers, theaters and outdoor concert halls, even over airports and train station platforms throughout Korea and Japan.

Tension structures are not only aesthetically attractive but also environmentally friendly. The PTFE (Teflon)-coated fiberglass, silicon-coated fiberglass, and vinyl-coated polyester materials



used to manufacture such structures are, by nature, waterproof and lightweight and require little or no maintenance. They are less expensive to construct than ordinary buildings and are easy to relocate. The materials used to manufacture these structures have been proved to last more than 30 years.

The safety of air-membrane structures is guaranteed; they are manufactured using flame-retardant fabrics. Computerized structural calculations are used during design to ensure they are sturdy enough to withstand high winds and heavy snowfalls. Since air-membrane structures are not classified as buildings, installation often does not require a standard building permit. Air conditioning and heating equipment may be installed if necessary.

Air-membrane structures are fabricated by injecting air. The occasional leak is easily repaired, and the structures can be refilled quickly. Sizes and shapes can be freely designed and produced according to the architect's requirements.

In 1999 Tiger installed a DCS 2500 single-ply GERBERcutter. Before this, they were cutting the

40,000 square meters (48,000 square yards), or the size of 86 football/soccer fields, of material required for each structure by hand. "With this cutter, there is just no comparison to manual cutting," explains Cho Ju-Soon, President of Tiger Corporation. "The DCS 2500 delivers perfectly cut pieces every time. We've saved 5 percent in material costs — more than \$115,000 a year. It now helps us fulfill customer orders 20 percent faster than before we automated."

"Of course, we've lowered our labor requirements," added Mr. Cho, "But, more important, we've improved working conditions for our employees. They used to have to spread and cut the material on the floor, resulting in a lot of strain and exhaustion. Today, with the cutter, we do it safer and faster."

The next World Cup will be played in 2006 throughout 12 cities in Germany. Germany last hosted the games in 1974 when they defeated the Dutch 2-1.

For more information, please visit www.tiger.co.kr.

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