



Beijing Botanical Gardens



The SCX Group successfully completed work on the design and partial manufacture of a sophisticated access system for China's Beijing Botanical Garden, built by the Chinese Government to commemorate the 50th anniversary of the People's Republic Of China.

The garden, featuring native plant life from all over the World, covers a floor area of some 7,000 square metres and is enshrined within a huge structure constructed entirely from glass.

The structure requires an access system which enables the glass to be cleaned and maintained both internally and externally.

SCX were contracted by Chinese glass construction company 'King Glass' to apply its specialist design engineering expertise. The solution was an innovative access system capable of accommodating the unique architectural features of the glass structure, which incorporates an unusual elliptical domed roof.

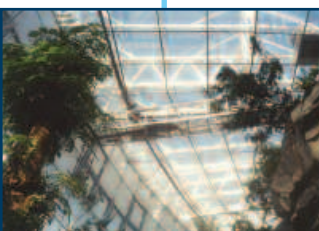
To make the project financially feasible, King Glass completed the installation of the access system and manufactured the basic aluminium structure themselves, to the exacting design specifications of SCX.

This remarkable and rare collaboration between a British and a Chinese company, succeeded in quartering the cost of what would have normally been a £1 million project to implement from initial design through to final installation.

The overall access system comprises of 15 travelling gantries and two one man manual cradles, which together enable total access to clean and maintain the interior and exterior surface of the entire glass structure.

The driving system of each gantry is battery powered; a technical innovation which eliminates the need to install expensive cable power feed systems.

Another innovative feature of the access system is that it incorporates telescopic and centre rotating (slewing) gantries,





which are used to negotiate some of the most awkward and inaccessible areas of the structure's architecture.

Overall there are six internal and six external telescopic gantries and one internal and two external slewing gantries. These provide access to two glass domed roofs, one elliptical and the other spherical in shape.

This project was different from others undertaken by the company, in so much as it involved a meeting of culturally different minds working closely together towards a common goal. There were many barriers to overcome and lessons to be learned, but we have gained valuable experience from this project which has been a resounding success in more ways than just one.