

Petronas Towers

Kuala Lumpur

Case Study



A comprehensive facade access system for the iconic Petronas Towers

One of the most iconic buildings in the world, Petronas Towers was the tallest building in the world at the time it was built and held the title until 2004. They remain the tallest twin towers in the world today. The Towers also feature a double decker skybridge which is the highest in the world at 170m above the ground.

As the tallest building in the world at the time of construction, with the tallest skybridge in the world, the towers presented a number of facade access challenges that demanded innovative solutions.

Manntech provided numerous machines to meet these challenges with a fully comprehensive access system. The Building Maintenance Units (BMUs) include two units in each spire which sit on a turntable meaning, when not in use, they can be stored in a fully concealed parking position behind panels in the spire. The BMUs themselves are crane types which can be driven forward towards the roof edge and telescope out over the side of the building. The system also includes smaller machines sitting on lower podiums and two BMUs travelling along the length of the skybridge: one above and one on the underside.

The challenges involved in this ground breaking project meant designing ground breaking solutions, including an entirely new hoist unit to reach the height required, as well as a specially designed restraint system for the cradle. Among many other firsts, this project was the first where a softrope system was applied to a highrise building. Manntech is the innovator and developer of this softrope system, which is now much imitated for most supertall highrise buildings.

As well as presenting innovative, practical solutions for new challenges, Manntech was selected based on a complete package of value, reliability and a strong local presence in Malaysia. After 20 years of service, the BMU machines Manntech provided are still performing well. Our machines are scheduled to be overhauled after this length of time in use and are expected to provide optimum facade access performance for another 20 years.

Facts and Figures

Commencement:
Early 1990's

Completion:
1997

Building Height:
452 metres

Floor count:
88

Access solution:
▶ 13x Type 6 BMUs

Outreach:
21.2 metres

Building Type:
Office

For more information

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