

Machang Bay Bridge (South Korea)



Project description

Construction of the 1.7km, dual two-lane, cable-stayed Machang Bay Bridge commenced in April 2004. The bridge will provide a vital link across Masan Bay and is expected to alleviate severe traffic congestion in the cities of Masan and Changwon as an alternative route for travel between Korea's two southern provinces, Jeollanam-do and Gyeongsangnam-do. The 450m cable-stayed main span is supported by slender 165m tall towers and the steel deck is 64m above the sea. Slip-forming was chosen as the most efficient method for the more straightforward lower sections of each tower. This allowed the upper 55m sections to be constructed using jump-forms which are more suited to the more complex upper tower zones which house the stay-cable anchorages.

Machang Bay Bridge will be the first large-scale bridge to be built in South Korea as a public-private partnership.

Delivered products

A range of mageba's TENSA®MODULAR expansion joints was supplied, including Type LR6 with a movement capacity of 480mm, Type LR11 with a capacity of 880mm and Type LR18 with a capacity of 1,460mm. All TENSA®MODULAR expansion joints allow movements and rotations in all three directions, and feature mageba's patented asymmetric control system for even gap distribution. Joints are equipped with special trumpet shaped joist boxes. Length of each expansion joint: 20m. Weight of one joint: approx. 40t.

Highlights & facts

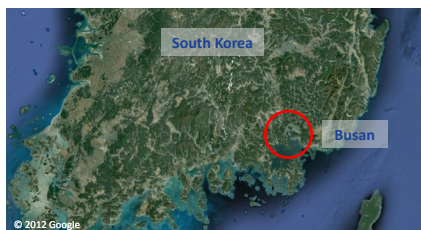
mageba-products:

Type: TENSA®MODULAR type LR6, LR11 and LR18
Features: Movement between 480 mm and 1'460 mm
Installed: 2008

Bridge:

City: Gyeongsangnam-do
Country: South Korea
Built: 2004-2008
Type: Cable stayed bridge
Length: 1700 m

Masan is an important sea port and textile centre



Production of the mageba expansion joint type LR18



TENSA®MODULAR type LR18 under traffic

