

Gwangang Bridge (South Korea)



Project description

In the harbour city of Busan, in the southern part of the Korean Peninsula, construction of the longest suspension bridge of South Korea was completed in September 2002. The Gwangang Bridge is surrounded by numerous natural islands and connects the city with the new harbour of Pusan.

The main feature of the 7.5 km long bridge system is an approximately 900 meters long, two story suspension bridge, divided into three parts (200 m + 500 m + 200 m). Each part hosts two 18 meter wide bridge decks with four lanes of traffic in each direction to accommodate the expected traffic volume of 60'000 vehicles per day. There is approximately 12 meter depth of ocean below the bridge structure.

Delivered products

TENSA®MODULAR expansion joints of the so called 4th generation have a waterproof system, which protects them from grit and surface drainage water. Because the expansion joints must accommodate rotational movements occurring within all three dimensions, the sliding spring and bearing systems were coupled with special low friction sliding surfaces, such that a high level of durability can be maintained under the demanding conditions. The lamella joints can simultaneously absorb longitudinal bridge movements in excess of 1200 mm and rotational movements about all 3 axes. The total weight of each lamella joint is approximately 30 tons.

Highlights & Facts

mageba Products:

Type:	TENSA®MODULAR type LR5, LR9 and LR15
Features:	max. movement 1'200 mm
Installed:	2002

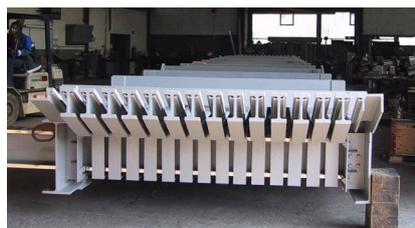
Bridge:

City:	Busan
Country:	South Korea
Type:	Suspension bridge
Length:	7.5 km

Location of the bridge near Busan in South Korea



mageba modular joint LR15 ready for delivery



The 7.5 km long Gwangang Bridge System

