Yeongjong Grand Bridge (South Korea)

Project description
The Yeongjong Grand Bridge is 4,420 m long, and incorporates three different structural systems: Suspension bridge (550 m), truss bridge (2,250 m), and steel box bridge (1,620 m). The bridge has double decks to carry a six-lane highway on the upper deck, and a four-lane highway with dual rail lines on the lower deck. The suspension bridge is a 3-dimensional self-anchored suspension bridge. The shape of the cable and the stiffened girder have been designed to symbolize the eaves of the traditional Korean Kiwa House (tile-roofed house).

Delivered products
mageba Tensa®Modular expansion joints type LR with movement capacity of 640 mm were chosen due to their proven elastic control system. Youngjong Bridge requires modular expansion joints which can ensure kinematic behavior, and prevents damage from constraint forces which could due to the combined lower deck especially (rail track and road lanes). Installed modular expansion joints at Yeongjong Grand Bridge can accommodate movements in every direction, and rotations about every axis. This ensures safety for traffic and train.

Highlights & Facts
mageba Products:
Type: 8 Tensa®Modular expansion joints type LR8
Features: max. movement 640 mm
Installation: 2000
Bridge:
City: Incheon
Country: South Korea
Built: 2000
Type: Self-anchored suspension bridge
Length: 4,420 m

Location of the bridge in Incheon, South Korea
Tensa®Modular expansion joints
640 mm movement (LR8)
Night view of Yeongjong Grand Bridge