Project description

The Aizhai Bridge was constructed between 2007 and 2012 to carry the G65 Baotou–Maoming Expressway across Dehang Grand Canyon in Hunan province, China. The impressive structure has a main span of 1,146 metres and a deck height of 350 metres above the ground.

When built, it was the world’s sixth highest bridge and fifteenth longest suspension bridge. It was also the world’s highest and longest tunnel-to-tunnel bridge, and of the world’s 400 highest bridges, none had a longer main span.

mageba scope

To provide a smooth and comfortable driving surface for vehicles at each end of the bridge’s deck, while enabling the deck to expand, contract and otherwise move and rotate as required by the bridge’s design, mageba supplied four large expansion joints – two at each end of the bridge.

The TENSA®MODULAR joints are of type LR17, each with 17 gaps to accommodate 1,360 mm of movement. The joints were designed for concreted connections to the bridge’s abutments, and welded connections to its steel deck.

Highlights & facts

mageba products:
Type: TENSA®MODULAR expansion joints (type LR17, with 17 gaps)
Features: Welded connection to steel bridge deck
Installation: 2012

Structure:
City: Jishou
Country: China
Type: Suspension bridge
Completed: 2012
Carries: G65 highway
Crosses: Dehang Grand Canyon
Main span: 1,176 m
Owner: Jicha Highway Aizhai Bridge Construction Headquarters
Contractor: Hunan Road & Bridge Construction Group Co., Ltd

The bridge crosses the Dehang Grand Canyon in Hunan Province, China

Transportation of a TENSA®MODULAR expansion joint, produced at mageba Shanghai

The underside of a TENSA®MODULAR joint, showing its support beams and control system