

Taohuayu Yellow River Bridge (China)



Project description

The Taohuayu Yellow River Bridge is the fourth bridge of the Xixia Wuzhi Highway over the Yellow River in the city of Zhengzhou. The bridge has an overall length of 7,691.5 m, including approaches.

The main structure is a two-tower, three-span self-anchored suspension bridge with a main span of 406 m and side spans of 160 m.

The stiffening girder was erected by the one-way, multi-point and synchronous incremental launching method, computer controlled.

The bridge opened to traffic in October 2013.

mageba scope

mageba supplied expansion joints and a structural health monitoring (SHM) system for the bridge when constructed. TENSA®MODULAR joints with up to 16 gaps (type LR16) each allow up to 1,280 mm of movement.

The SHM system enables the condition and performance of the newly constructed structure to be continually assessed, for the purposes of initial construction quality control and ongoing inspection and maintenance.

It also maximizes the bridge engineer's understanding of the structure's response to environmental and other influences.

Highlights & facts

mageba Products:

Type: TENSA®MODULAR expansion joints (LR16), ROBO®CONTROL monitoring system

Installation: 2013

Structure:

City: Zhengzhou

Country: China

Completed: 2013

Type: Suspension bridge

Length: 7,691 m

Owner: Henan Taohuayu Yellow River Bridge Investments Co., Ltd.

Contractor: China Railway Mayor Bridge Engineering Group CO., LTD

Designer: Shandong Provincial Communications Planning and Design Institute

The bridge crosses the Yellow River in the city of Zhengzhou in eastern China



A 13-gap TENSA®MODULAR expansion joint at one end of the cable suspended structure



The ROBO®CONTROL SHM system enables movements to be quantified and understood

