

Lupu Bridge (China)



Project description

Lupu Bridge in Shanghai is a through arch bridge that spans over the Huangpu River connecting the city's Huangpu and Pudong districts. It is the second longest steel arch bridge in the world, which accommodates 6 traffic lanes and has a total length of 8,722 m.

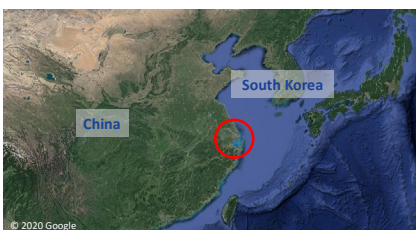
The main bridge structure is 750 m long including the two side spans of 100 m each and a main span of 550 m.

The structure was originally built to ease congestion between the quickly developing areas in southern Puxi.

With its world-class standard and unique bridge structure, Lupu Bridge is well known in the world.

In 2008 it received the IABSE's Outstanding Structure Award, and now besides being an important crossing on the Huangpu River, it also serves as an important sight-seeing attraction of Shanghai.

Lupu Bridge is located in the city center of Shanghai, China



mageba scope

The bridge's expansion joints were replaced with mageba's TENSA®FINGER GF sliding finger joint that are perfectly suitable for heavy traffic.

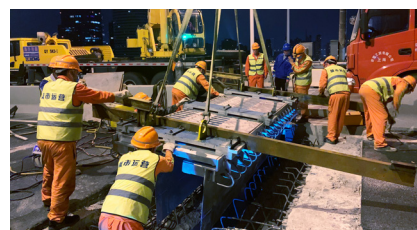
The installed 10 TENSA®FINGER GF sliding finger joints with their total length of 108 m facilitate movements of up to 480 mm.

During construction, mageba used the "steel structure modularization" technology to replace the damaged expansion joints.

To minimize traffic disruption, the work took place only at night, when the joints were installed segment by segment.

The geometry of the interlocking fingers ensures low noise emissions and high driving comfort, while the modular structure of the joints adapts to the standardized operation of modern bridge BIM systems.

The installation of TENSA®FINGER GF sliding finger joints was carried out at night



Highlights & Facts

mageba Products:

Type: TENSA®FINGER GF sliding finger joint
Installation: 2019–2020

Structure:

City: Shanghai
Country: China
Completion: 2003
Type: Through arch bridge
Main span: 550 m
Length: 8,722 m
Designer: Shanghai Municipal Engineering Design Institute (Group) Co., Ltd
Owner: Shanghai Shipyard Co., Ltd
Contractor: Shanghai Municipal Maintenance Management Co., Ltd

A TENSA®FINGER GF in its final position on the bridge

