

Zengjiayan Jialing River Bridge (China)



Project description

The Zengjiayan Jialing River Bridge is located in Chongqing City, Southwest China, which is famous for the surrounding mountains, and also for its unique bridges such as this one, whose vivid, warm “China Red” colour makes it an outstanding landmark of the city.

The 5.63 km-long structure, stretching between Liujiatai and Zengjiayan Tunnels, is a dual purpose steel truss bridge. There is a six-lane urban arterial road on the upper deck, designed for a speed limit of 50 km/h, and a deck for railway traffic below, with a maximum speed of 120 km/h. The bridge also houses Zengjiayan Station, which is the first railway station built on a large steel truss bridge in China.

Zengjiayan Jialing River Bridge was opened to traffic in December 2020.

mageba scope

In 2018, mageba designed and manufactured 82 RESTON®POT HP bearings to support the structure, with a maximum vertical load capacity of up to 15,000 kN.

In addition to the pot bearings, 12 RESTON®SPHERICAL bearings, with a maximum vertical load of 137,500 kN, were also delivered and installed.

The sliding surfaces of the pot and the spherical bearings were treated with ROBO®SLIDE high-grade sliding material, which has a maximum compressive stress of 180 MPa, and also an excellent wear resistance. No wear and tear occurred during the sliding test, performed at 50 km/h, and its mechanical properties showed no significant degradation at high temperature (70 °C).

Highlights & Facts

mageba products:

Type: RESTON®POT HP and RESTON®SPHERICAL bearings

Installation: 2018

Structure:

Country: China

City: Chongqing

Completion: 2020

Type: Steel truss bridge

Length: 5.63 km

Owner: Chongqing Zengjiayan Bridge Construction Management Co., Ltd

Construction: China Communications 2nd Navigational Bureau 2nd Engineering Co., Ltd

Designer: China Merchants Chongqing Communications Technology Research & Design Institute Co., Ltd

The Zengjiayan Jialing River Bridge is located in Chongqing City, Southwest China



The mageba production team assembled the spherical bearings at the Shanghai factory



A spherical bearing during installation

