

Irtys River Bridge (Kazakhstan)



Project description

This six-lane suspension bridge was constructed between 1998 and 2002, to cross the Irtys River in the city of Semipalatinsk in eastern Kazakhstan. It has a main span of 750 m and a total length of 1086 m, and was designed and built by a Japanese-lead consortium.

The very tight time scheduling imposed by the bridge construction project presented some significant challenges for the supply of the bridge's bearings, with just fourteen weeks allowed for design, manufacture and delivery.

mageba scope

mageba supplied some exceptional components to control the bridge deck's movements and keep it stable. At both ends of the bridge, enormous rocker bearings (pendulum tension force bearings) were supplied to resist uplift forces. These are up to 6.70 meters long and weigh 8000 kg each. Equally enormous wind shoes were also delivered, one for each side of each abutment, to resist transverse wind forces. Finally, 20 RESTON®SPHERICAL bearings, for loads of up to 10,500 kN, were also supplied, after testing of raw materials for notch impact value and tensile strength at -50 °C.

Highlights & facts

mageba products:

Type: Rocker (pendulum tension force) bearings, Wind shoes, RESTON®SPHERICAL bearings

Installation: 1999

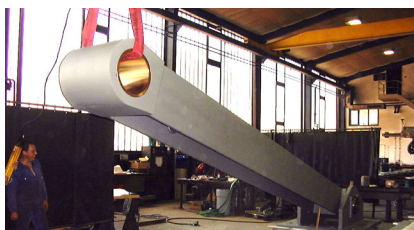
Structure:

City: Semipalatinsk
Country: Kazakhstan
Completed: 2000
Type: Suspension
Length: Main span 750m

The bridge is located in Semipalatinsk, Kazakhstan



A rocker bearing during a rotation test in the factory



Two wind shoes, ready for delivery from the factory in Switzerland

