Amurskaya Creek Bridge (Russia)



Project description

The Amurskaya Creek Bridge at Bolshoy Ussuriysky Island was constructed between 2011 and 2013 to provide a new, year-round road connection between the city of Khabarovsk in Russia's Far East and the nearby Chinese border. The 10-span bridge has a total length of 957 m, with individual spans of up to 126 m.

The bridge's continuous box-section steel deck was erected by the incremental launch method (ILM). As is common in steel bridges, the design required the bearings to be installed "upside down" for optimised performance, with their sliding plates below, rather than connecting to the bridge deck as is otherwise generally the case.

mageba scope

20 RESTON®SPHERICAL bearings support the bridge's deck, two at each pier, carrying vertical loads of up to 15,000 kN. They also accommodate sliding movements of up to +/- 315 mm, with ROBO®SLIDE high-grade sliding material used as a superior alternative to PTFE. Due to the "upside-down" installation, the sliding interfaces on the bottom are more vulnerable to dirt and damage, and therefore protected by bellows-type dust covers.

The bridge is also equipped with TENSA®MODULAR expansion joints of type LR8, facilitating movements of up to 640 mm, at both abutments. These are equipped with mageba's special hump-type rubber seals for improved durability.

Highlights & facts

mageba products:

Product: TENSA®MODULAR

expansion joints (LR8), RESTON®SPHERICAL bearings (15 MN)

Features: ROBO®SLIDE high-grade sliding material (joints),

bellows-type dust protection (bearings)

Installation: 2013

Structure:

City: Khabarovsk
Country: Russia
Completed: 2013
Type: Road bridge
Length: 957 m

Contractor: SK Most

The bridge is located near the city of Khabarovsk in Russia's Far East, close to the Chinese border.



20 RESTON®SPHERICAL bearings, two per pier, support the bridge's deck.



A TENSA® MODULAR expansion joint, showing the demanding conditions to which it is exposed.



