

Liman Connection Viaduct (Turkey)



Project description

Liman Connection Viaduct (V07) is part of the North Marmara Highway, which plays an essential role in providing both a better and faster connection between Europe and Turkey.

The 195 km long new highway also includes the impressive Third Bosporus Bridge, which lies to the north of Istanbul.

This bridge is Turkey's second highest viaduct with a pier height of 138 m, and it also connects to the Osmangazi Bridge that secure a faster and easier way to reach several cities in the southwest region of Turkey.

The construction started in the middle of 2018 and after the installation of mageba expansion joints, it was opened to traffic in August 2019.

mageba scope

For this project mageba delivered 20 bearings in total:

- 8 RESTON®SPHERICAL Spherical bearings
- 4 RESTON®FORCE Guided bearings
- 8 RESTON®UD Uplift devices

The viaduct is also equipped with one of the biggest joints with fuse element in Turkey. These were designed to accommodate +/-1,100 mm displacement.

Four joints out of twelve were fitted with fuse elements, since the viaduct lies in a seismically active region. These were necessary to prevent any serious damage of the bridge deck or the joints in case of an earthquake.

Highlights & facts

mageba products:

Type: RESTON®SPHERICAL and

RESTON®FORCE bearings RESTON®UD Uplift devices TENSA®MODULAR LR and LR-FE joints

Feature: Joints with fuse elements

Installation: 2018-2019

Structure:

City: Kocaeli Country: Turkey

Type: Balanced cantilever

viaduct

Main span: 95 m Completion: 2019

Owner: General Directorate of

Highways

Contractor: Limak Construction
Architect: Wiecon co. Ltd.

The viaduct is located east of Istanbul in the city of Kocaeli



Installation of an expansion joint with fuse element



Installation of special bearings on piers

