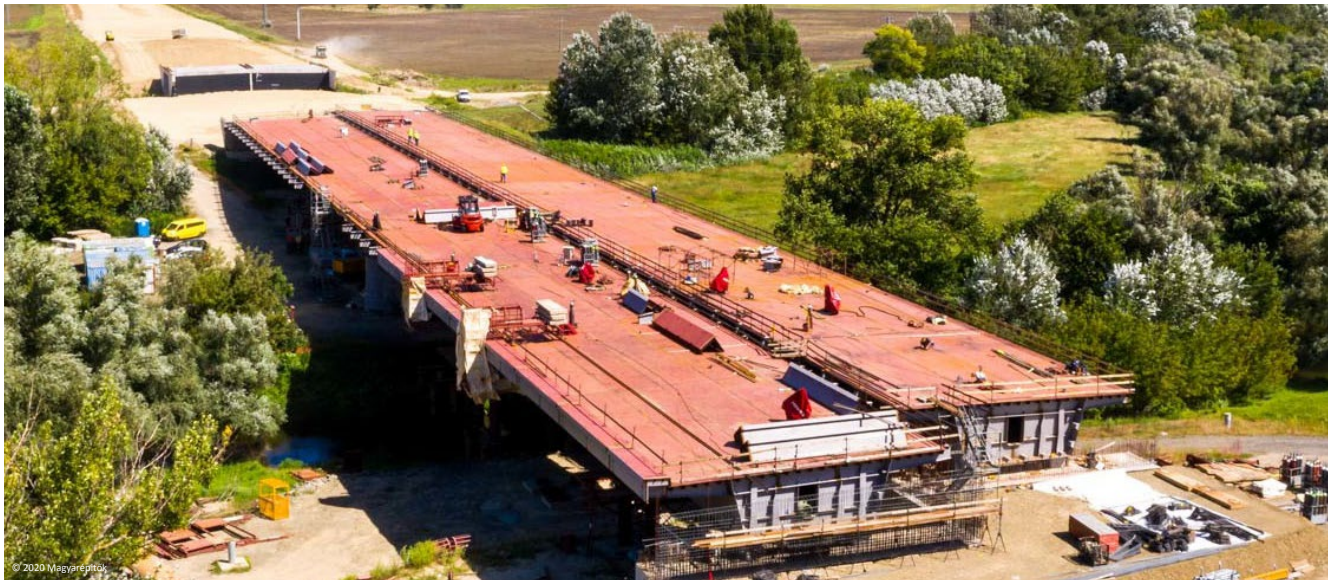
Zagyva Bridge (Hungary)



Project description

The M4 motorway in Hungary upon its completion will connect Budapest to Oradea and other Romanian cities.

The route will pass by the towns of Cegléd, Szolnok, Karcag, Püspökladány, Berettyóújfalu in Hungary before reaching the Romanian border.

The motorway has been built in sections. The first 10 km-long section was opened to traffic in 2004, and ever since new sections have been opened gradually.

The Zagyva Bridge is situated on the new 27 km-long Abony – Törökszentmiklós section of the M4, north of the town of Szolnok and it consists of 2 separate superstructure, each carrying 2 traffic lanes.

As for its design, Zagyva Bridge is a singe box girder bridge and has a length of 169 m.

mageba scope

To meet the requirements of the client mageba supplied and installed 12 RESTON®SPHERICAL bearings in total.

From the bearing types KA and KE 4-4 were installed respectively, addition to the 2 KF and 2 KEq bearings, which were also required to support the bridge superstructure. The weight of the KF type bearings exceeds 1 ton.

Due to the small space between the substructure and superstructure the bearings could be only installed by using Welding Procedure Specification (WPS).

In addition to the bearings, 4 TENSA® MODULAR LR2 joints each measuring 15.8 m in length, were also installed on both ends of the 2 separate bridge decks.

Their installation required particular precision, as the joints had to be fixed to the bridge's steel structure on one end, while on the other they were connected to reinforced concrete slabs.

Highlights & Facts

mageba Products:

Type:	RESTON®SPHERICAL bearings TENSA®MODULAR LR2 expansion joints
Installation:	2020–2021

Structure:

City:	Szolnok
Country:	Hungary
Type:	Singe box girder bridge with orthotropic deck
Built:	2020–2021
Span:	84 m
Length:	169 m
Owner:	Nemzeti Infrastruktúra Fejlesztő Zrt.
Designer:	RODEN Mérnöki Iroda Kft.
Contractor:	Colas Közlekedésépítő Zrt.

The bridge is located north of the town of Szolnok in Hungary

One of the RESTON®SPHERICAL bearings of type KA installed

A TENSA®MODULAR LR2 joint during installation

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