# A7 Fulda Valley Bridge (Germany)



## **Project description**

The A7 is the longest German autobahn and also the longest national motorway in Europe, with a length of 963 km. It bisects Germany almost evenly between east and west, extending all the way from the Danish border in the north to the Austrian border in the south.

One of the motorway's many viaducts is the Fulda Valley Bridge at Welkers, near the city of Fulda in central Germany. The multi-span, prestressed concrete structure has a length of 931 m. During the course of renovation works in 2009, the expansion joints at each end of its deck were renewed.

## mageba scope

In replacing the viaduct's expansion joints, it was decided to install new TENSA®MODULAR joints of type LR-LS. In contrast to standard TENSA®MODULAR joints of type LR, these feature noise-reducing sinus plates on their surface, which bridge the joint's individual movement gaps, preventing wheel impacts. The use of Type LR-LS joints thus minimises the noise caused by vehicles crossing the joints, which can be a cause of significant disturbance to the local community. It also increases driver comfort and minimises wear and tear, both on the expansion joint and on crossing vehicles.

## **Highlights & facts**

#### mageba products:

Type: TENSA®MODULAR

expansion joints (Type LR4-LS)

Features: Noise-reducing surface plates ("sinus plates")

Installation: 2009

#### Structure:

City: Welkers / Fulda Country: Germany Type: Motorway viaduct

Renovated: 2009 Length: 931 m

The bridge carries the A7 autobahn across the Fulda River Valley in central Germany



Securing of two TENSA® MODULAR expansion joints with sinus plates on a truck for transport



Installation of a TENSA®MODULAR expansion joint (type LR4-LS100), prior to concreting



