## Railway bridge WK432, Bytom (Poland)



## **Project description**

This bridge was constructed in 2010-2011 near the city of Bytom in southern Poland, to carry a railway line over the A1 motorway. The new construction of the motorway in this area necessitated the building of a bridge to enable road and rail traffic to flow freely at the crossing point.

The bridge consists of two reinforced concrete structures, side by side – one for each of the two railway tracks. Noise reduction measures were necessitated by the presence of a residential area close to the bridge.

## mageba scope

mageba supplied TENSA®MODULAR expansion joints for the construction of this bridge. Four joints were required, one for each end of each structure. The joints are of type LR8-RW, the suffix "RW" standing for "railway". They are designed for the particular challenges presented by railway bridges, such as the ballast stones that would block the gaps of a normal modular joint and must be prevented from entering the gaps, and the high axle loads and vibrations from rail traffic.

The joints also feature ROBO®MUTE noisereducing mats underneath, to reduce noise under traffic.

## **Highlights & facts**

mageba products:	
Туре:	TENSA <sup>®</sup> MODULAR expansion joints (type LR8-RW)
Features:	Railway bridge joints, ROBO <sup>®</sup> MUTE noise- reducing mats
Installation:	2011
Structures:	
Function:	Railway bridge
Country:	Poland
Completed:	2011
Type:	Reinforced concrete

The bridge crosses the A1 motorway near the city of Bytom in southern Poland



Lifting of a TENSA<sup>®</sup>MODULAR type LR8-RW joint into position on the bridge



A TENSA®MODULAR joint of type LR8-RW (railway bridge joint) during installation



