

Schwarzwaldallee Bridge (Switzerland)



Project description

The structure spans the highway A2 in Basel and is divided into 5 segments with different structural systems. A part of the structure is a box girder construction, the other part is a prestressed bridge slab supported on a long wall slab. Expansion joints are located at the transitions to the access ramps and between the individual segments. The structure, which dates back to 1976, had to be repaired under constant traffic on the highway below and under limited traffic on the bridge itself.

mageba scope

The construction method of the 1970s is characterized by very slender concrete cross-sections, which are correspondingly heavily reinforced. Particularly in the area of the expansion joints, this reinforcement does not allow any significant intervention in the concrete, so that no classical anchoring of an expansion joint could be carried out, although considerable movements have to be accommodate.

The solution was an elastic plug expansion joint that requires only minimal intervention in the concrete. The TENSA® POLYFLEX® Advanced PU expansion joint was already proposed in the project's preliminary study by mageba and subsequently installed. In addition to the expansion joint's long service life, this system is maintenance-free and very quiet under traffic.

Highlights & Facts

mageba Products:

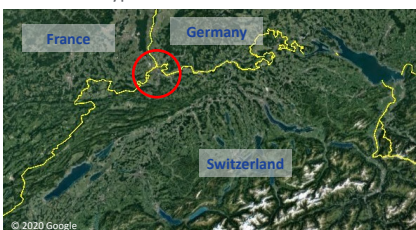
Type: TENSA®POLYFLEX®
Advanced PU flexible
plug expansion joint

Installation: 2018–2019

Structure:

City: Basel
Country: Switzerland
Type: Concrete road bridge
Length: 155 m
Completion: 2019
Owner: Bundesamt für Strassen
ASTRA
Contractor: WALO AG
Engineer: Aegeter & Bosshard

The elevated bridge Schwarzwaldallee is part of the eastern bypass in Basel



Structural concrete with a large amount of reinforcing bars, which prevent usual anchoring of an expansion joint



POLYFLEX® Advanced PA50-PU almost invisible matching the concrete under service condition

