

Lowlands Motorway S-10 (Switzerland)



Project description

In 2004, the existing expansion joint was replaced on the S-10 Viaduct near Bulach, between Zurich and Schaffhausen (Switzerland).

The so called twin bridge has a total length of about 295 meters and is supported on 8 twin columns. The spans between supports are between 23 and 40 meters.

After about a 20-year-long useful life, the existing expansion joints were replaced by a mageba RSFD cantilever finger joint construction.

Delivered products

Two RSFD cantilever finger joints, with a maximum movement capacity of 160mm, were installed on the northern side of the Viaduct. Single gap expansion joints with a movement capacity of 80mm were used on the southern side. Due to the open construction of the cantilever finger joint, a maintenance-friendly drainage system with a sideways fixed overflow system was chosen. In order to optimise the driving comfort and to expand the fatigue life of the asphalt, supporting ribs with the Robo®Dur system were placed on both sides of the joint. The supporting ribs secure massive strengthening of joint beams, so that lane grooves do not form in the asphalt, as a result of heavy loads. The supporting ribs are aligned under a 45° angle.

Highlights & facts

mageba-products:

Type: TENSA®FINGER type RSFD
TENSA®GRIP type RS
ROBO®DUR asphalt strengthening ribs

Features: max. movement 160 / 80 mm

Installed: 2003

Bridge:

City: Bulach
Country: Switzerland
Type: Viaduct
Length: 295 m
Builder: Building management
Canton Zurich

The S-10 Viaduct is located between Zurich and Schaffhausen.



Exact levelling of the RSFD cantilever finger joint construction.



Smooth crossing due to an innovative supporting rib construction system ROBO®DUR

