

Europa Bridge, Brenner Pass (Austria)



Project description

The Europa Bridge carries the A13 Brenner Autobahn (and European route E45) across a valley near Innsbruck, Austria. Built between 1959 and 1963, it was once Europe's highest bridge, standing 190 m above the valley floor. It has a total length of 777 m, and a longest span between pillars of 198 m.

Carrying more than ten million cars and two million heavy goods vehicles (HGVs) per year, it is one of Austria's busiest highways. It is also one of Europe's main north-south transit routes across the Alps. Due to its location at high altitude, it is subjected to below-freezing temperatures several months of the year.

mageba scope

In 2003, when the bridge's expansion joints needed to be replaced, mageba supplied TENSA®FINGER sliding finger expansion joints for two bridge axes. The joints are of type GF600 and GF480 (with 600 mm and 480 mm movement capacities, respectively), and each has a length of 25 m.

These joints are subjected to exceptionally demanding service conditions. In addition to the location's severe Alpine climate and the bridge's heavy traffic volumes, the joints are installed in the bridge where it has a longitudinal slope of 6%, and where traffic thus strongly accelerates (starting the climb) or brakes (coming off the slope of the bridge) – resulting in very high horizontal loading in particular.

Highlights & facts

mageba products:

Type: TENSA®FINGER sliding finger expansion joints (GF600, GF480)
Installation: 2003

Structure:

Location: A13 Brenner Pass highway, Austrian Alps
Country: Austria
Type: Highway bridge with steel box girder deck
Length: 777 m
Height: 190 m
Completed: 1964
Renovated: 2003

The bridge forms part of the Brenner Pass highway through the Austrian Alps.



Installation of a TENSA®FINGER sliding finger expansion joint to replace an old existing joint.



A TENSA®FINGER sliding finger expansion joint (type GF600) as installed, work almost complete.

