

Argen Bridge (Germany)



Project description

The Argen Bridge, with its span of 68.4 m, was erected in 1897, making it the second oldest suspension bridge in Germany. The historic footbridge was renovated in 2010, with particular focus on the upgrading of its key mechanical components and the retrofitting of seismic protection.

The renovation work included the replacement or addition of bearings, expansion joints and seismic dampers. It also included extensive concrete reconstruction at each abutment, with access chambers and shafts provided as required for inspection and maintenance purposes and for installation of the seismic dampers.

mageba scope

The renovation of this wonderful structure required careful selection of materials and components to avoid unnecessary impacts on the structure's heritage value. To support the deck's side girders, free-sliding RESTON®SPHERICAL bearings were chosen for their high strength / small size. To support the central girder, LASTO®BLOCK Type NBe bearings were used to prevent transverse movements and provide longitudinal re-centring.

RESTON®SA dampers were connected to the ends of the central girder to dampen excessive longitudinal forces (e.g. seismic), and TENSA®GRIP expansion joints were installed at both ends of the deck.

Highlights & facts

mageba products:

Type: LASTO®BLOCK Type NBe and RESTON®SPHERICAL bearings, RESTON®SA dampers, TENSA®GRIP joints
Installation: 2010

Structure:

City: Langenargen
Country: Germany
Type: Suspension bridge
Completed: 1897
Renovated: 2010
Length: 68.4 m

The bridge is located in southern Germany, close to Lake Constance



Abutment with bearings and tie-down anchors, showing girder passing through wall to damper



Seismic damper in access shaft, from above (connecting through wall on right to deck girder)

