

# New Grevenmacher Bridge (Luxembourg)



## Project description

The Moselle River, which forms part of the border between Luxembourg and Germany, has for many years been crossed by a road bridge between the towns of Grevenmacher in Luxembourg and Wellen in Germany. In the early years of this century, it became apparent that the existing bridge needed to be demolished and rebuilt. A new bridge was therefore designed, for vehicular, cycle and pedestrian traffic, and constructed in 2013. The new structure is an arch bridge of length 213 m. Fabricated some distance away, the superstructure was transported to site on a barge, rotated through 90 degrees and fixed in place.

## mageba scope

The bridge's deck is supported by ten RESTON®SPHERICAL bearings, two at each of five axes including the two abutments. Resistance to transverse movement at the abutments is provided, not by the spherical bearings at those locations which are designed as Type KA (free sliding) bearings, but by separate RESTON®FORCE Type F horizontal force bearings. These resist only transverse forces, of up to 350 kN, while allowing longitudinal movements of up to 210 mm.

The RESTON®SPHERICAL bearings are designed to carry loads of up to 21,000 kN, and a number feature uplift protection, resisting upward forces of up to 900 kN.

## Highlights & facts

### mageba products:

Type: RESTON®SPHERICAL and RESTON®FORCE bearings

Features: Uplift protection

Installation: 2013

### Structure:

City: Grevenmacher / Wellen

Country: Luxembourg / Germany

Completed: 2013

Type: Arch bridge

Length: 213 m

The bridge crosses the Moselle River on the border between Luxembourg and Germany.



Two RESTON®SPHERICAL bearings (at sides) and one RESTON®FORCE bearing, at one abutment.



A RESTON®FORCE Type F bearing as installed, securing the deck transversely at an abutment.

