

# St. Nicolas Bridge (France)



## Project description

After the Second World War the Americans were building the iconic bridge of St. Nicolas in Revin, Ardennes, by using elements from the port of Arramachnes in Normandie. They thus provided a crossing over the Meuse River.

The aim for its re-construction had been to replace the single-lane bridge that represents an obstacle to the river flow in flooding conditions. It shall provide both roadways, a bidirectional cycle lane and two pedestrian paths. The new steel deck has a weight of 900 tons, a length of 128 m, and a variable thickness of 1.8 m to 3 m from abutments to pile.

## mageba scope

To accommodate the movements in every direction, mageba supplied multi-gap expansion joints TENSA®MODULAR that can be used for very large longitudinal movements of well over 2,000 m. This joint type comes with a watertight system, which was invented by mageba several decades ago and has been continually developed in recent decades. The current 4th generation of the system fully accommodates high demands and thus has been a perfect solution for the new steel bridge.

## Highlights & facts

### mageba products:

Product: TENSA®MODULAR LR-2 and RS expansion joints  
Installation: 2015

### Structure:

City: Revin  
Country: France  
Completed: 2015  
Type: steel bridge  
Length: 128 m  
Contractor: Eiffage and Bouygues  
Architects: Greish Engineering Bureau  
Owner: Conseil général des Ardennes, Direction of roads and infrastructures

The steel bridge is located in Revin in the French Ardennes and borders on Belgium.



Installation of the TENSA®Modular joints with a total length of 15.5 m.



Schematic illustration of the TENSA®MODULAR expansion joint.

