

# Órhalom-Ipolyvarbó Bridge (Hungary)



## Project description

The Órhalom-Ipolyvarbó Bridge is a 35-meter long double girder bridge, that crosses the Ipoly River, which forms a natural border between Slovakia and Hungary.

As a result, the bridge not only functions as a river crossing, but also as a border crossing between the two countries.

Since it is expected that the traffic would be fairly small on this route due to the other nearby border crossings, the road leading to the bridge was designed to situate below the standard flood level. In the event of high river flooding, the road would be flooded and therefore closed.

This means that the road wouldn't be operational during these periods. But this approach provided the most optimal solution, taking into account the traffic conditions, and at the same time reducing the total cost of the project to a large extent.

The bridge is located on the border of Hungary and Slovakia



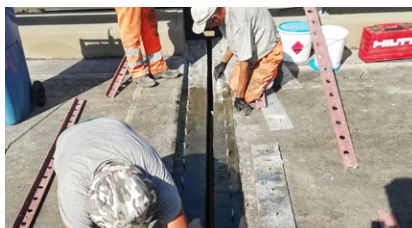
## mageba scope

To accommodate the movements of the bridge's steel structure it was decided to install an 7.9-meter-long TENSA® POLYFLEX® Advanced PU flexible plug joint of type PA50, which has a movement capacity of 50 mm.

This plug joint was partially chosen as it creates a perfectly flat transition between the structure and the road surface. In addition, it can be easily and quickly repaired or replaced if necessary, which was another major consideration in this case. Since the bridge is near an inhabited area the TENSA®POLYFLEX® joint's low emission level also made it a perfect choice, as well as its waterproof property, which comes really handy in case the bridge gets flooded.

To perfectly level the joint, a ROBO®DUR 42 polymer concrete substructure was also installed in 90 mm thickness under the product.

Preparing the recess of the joint before pouring



## Highlights & Facts

### mageba Products:

Type: TENSA®POLYFLEX® Advanced PU joint of type PA50  
ROBO®DUR 42 polymer concrete  
Installation: 2023

### Structure:

City: Órhalom  
Country: Hungary  
Type: Double girder bridge  
Length: 35 m  
Owner: Nemzeti Infrastruktúra Zrt.  
Contractor: Hídépítő Zrt  
Design: FŐMTERV Zrt.

TENSA®POLYFLEX® joint after installation

