



Reconstruction of the Jiul passage in Timișoara

Data and facts

Company

Type

Bridge construction

Runtime

06.2016 - 10.2017

Principal

Municipality of Timișoara

[Project report online](#)

www.porr-group.com



Exceptional transformation of a bridge.

The finalised passage, measuring 5.85 x 4.3 x 16.5m and with a weight of 550t, was additionally post-stressed in all directions. A mixed steel and concrete shield was placed on the front side of the passage in order to secure the embankment from the top and to decrease the friction during the pushing. Eight hydraulic presses with a total compression force of 24,000kN were installed on the back side of the passage, ensuring the pushing. In order to remove friction, additional steel sheets ensured a separation between the ground and the passage. After lifting the old bridge deck during a short total traffic closure, the top of the passage was excavated and the bearings were mounted. At the same time the old abutment was dismantled.

The new bridge decks were designed as composite bridges and precast on the construction site. After finishing the bearings, one of the three 115t decks was lifted into the final position. The railway tracks had to be closed for three hours only. As soon as the new railway track was mounted, railway traffic was opened and work on the next bridge deck could begin.

Like the old one, the new 19m long bridge consists of three separate bridge decks. It was executed as a trough bridge with composite construction technique. All bridge decks were finalised next to the old bridge and afterwards lifted into their ultimate location. Finally, the roads were adapted to the new situation.

A special finishing feature was the installation of a road surface heating device integrated in the concrete road structure to keep the passage free from snow and ice all year. With this wide-ranging and highly challenging project, PORR could demonstrate once more its technical expertise and know-how.

Impressions



Image notes

1

Make new from old.

In the Jiului overpass project, PORR applied unconventional techniques like “box jacking” and used one abutment of the old bridge for the new one.

2

Our job is done here.

Closing ceremony after a demanding but successful 17-month project

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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