

28 November 2024

A unique bridge spanned Orlík reservoir. It will be able to carry modern trains and speed up traffic

Today Správa železnic festively launched the operation on the bridge over the Orlík water reservoir. Its reinforced concrete arch has a span of 156 metres and is thus the largest in the Czech Republic. The new bridge, called the Schwarzenberg Bridge, will enable the introduction of modern trainsets on passenger trains, shortening travel times and also the resumption of freight transport on the entire line from Tábor to Písek. The construction started in January 2022; the total cost is almost CZK 685 million.

The reinforced concrete arch structure was built in close proximity to the existing bridge from 1889. Last Wednesday it passed a load test using two historic locomotives that have the required weight.

"The completion of the bridge will bring passengers between two important South Bohemian centres a faster train ride and also greater comfort thanks to the introduction of modern trains. In addition, freight transport may return to the line. The bridge is also ready for the installation of overhead contact line poles as part of the prospective electrification," says Minister of Transport Martin Kupka.

The construction of the bridge with a height of 69 metres above the Vltava riverbed began in January 2022 with the construction of the foundations. On the Tabor side, where they are embedded deep into the original rock wall, blasting of the rocks was necessary. For this phase of the construction, the lowered level of the Vltava River was used in connection with the construction of a new spillway at the Orlík reservoir.

This was followed by the concreting of the arch using a special trolley that moved over the already completed section. The builders first reinforced it and then concreted it. After connecting the arch, the construction of the bridge deck over the arch was completed.

"The current closure, during which the track was also connected to the new route, will end tomorrow afternoon. The builders then only have to complete the landscaping and recultivation of the area, these works will last until next spring," describes Jiří Svoboda, Director General of Správa železnic.

The contractors are Metrostav TBR and Metrostav. The total amount of costs is CZK 684,981,276, the financing is provided by Státní fond dopravní infrastruktury (State Fund for Transport Infrastructure).

"This project was extremely challenging, especially because of the need to remove the rock mass and perform fly-cast concreting. The arch of the bridge rises at an angle of almost 45 degrees at its base and leads through a 1.5 m high and 3.8 m wide passage chamber. We had to reinforce it very thoroughly, which required over 500 tons of steel reinforcement," said Aleš Gothard, Director and Chairman of the Board of Metrostav TBR.

In the case of the historic bridge, Správa železnic is dealing with the transfer of ownership rights to the association Viadukt, which intends to manage it and turn it into a cultural space and cycle path.