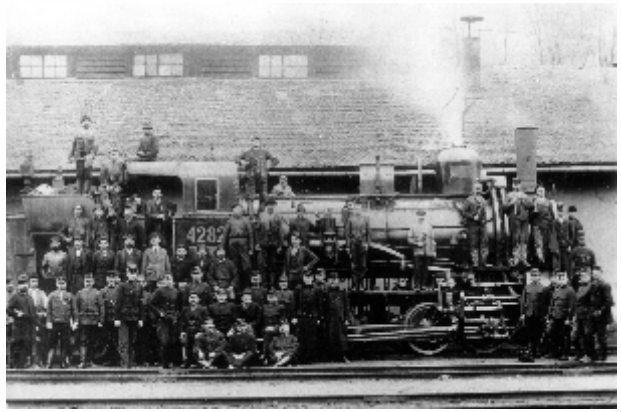
Visit the Museum of the rack railway next to the dispatch building of the railway station in Tisovec (open on days of steam trains operation between 8 AM and 5 PM while steam train is in Tisovec; other days upon request at info@zubacka.sk).

BRIDGE OF ČERTOVÁ



RACK STEAM LOCOMOTIVE 4282, TISOVEC

VIADUCT „POD DIELOM“ AFTER THE WAR

Photos: Rudolf Schlöpker, Lumír Kunc, Igor Molnár, Jaroslav Křenek, zbierka Martin Žaba a OZ Zubačka

HISTORIC RACK RAILWAY TISOVEC - ZBOJSKÁ POHRONSKÁ POLHORA

1896

IN THE HEART OF SLOVAKIA

UNIQUE IN ALL EUROPE

STEAM RACK RAILWAY VIADUCTS AND TUNNEL

HISTORY

There were several standard gauge rack railways built at the turn of the 19th and 20th centuries in the territory of the Austrian-Hungarian Monarchy and one of them was the section of Bánovo – Zbojská – Pohronská Polhora of the local Podbrezová – Brezno – Tisovec railway, which started to operate in 1896. It was built mainly in order to make the connection between the ironworks of Tisovec, Podbrezová and Hronec easier.

The project designers suggested connecting the departure and final station of the new route via a railway with the total length of 41.2 km, which was surmounting the mountain ridge of Slovenské Rudohorie through the saddle of Zbojská at the altitude of 725 metres and inclinations of up to 50.2 per mille. A double-plate rack railway of the Abt system with the total length of 5.836 metres was placed on two sections. Between the stations of Bánovo and Zbojská, it was surmounting a vertical drop of 166 metres on a 4.7 km-long track.

Four adhesive steam locomotives of the TIVb MÁV category with inventory numbers 4281 – 4284 were bought for the rack railway of Tisovec in the Austrian locomotive factory of Floridsdorf between 1896 and 1900. They were the biggest rack railway locomotives in Europe at that time. After 1924, ČSD (Czechoslovak State Railways) marked them with numbers 403.501 – 4.

From the beginning, the rack railway was used for passenger and freight transport, the latter mainly for coal, raw and processed iron, as well as timber and firewood. The speed of steam trains reached 25 km/hour in the adhesive part of the track but was limited to 12 km/hour on the rack railway and even 8 km/hour in case of freight trains. The maximum allowable weight of a train on the rack railway was 180 tonnes. The steam trains were surmounting the most difficult 8.9 km-long section of the track between the stations of Pohronská Polhora and Bánovo within 1 hour and 10 minutes. Due to safety reasons, the steam locomotive had to be placed in the lowest part of the train when moved on the rack railway. That is why the trains were always pushed up the hill.

The end of WWII was a significant turning point in the development of the rack railway. When retreating during the night of 27th and 28th January 1945, the German army destroyed the big viaduct called “Pod Dielom”, which stopped the whole transport on the line.

After the liberation, the viaduct was soon replaced by a massive temporary facility of wood so that the rack railway could start to operate again on January 28th, 1946 – exactly one year after it had been stopped. In 1959, the temporary wooden facility was replaced by a big bridge of steel which has been in place until these days.

In the era of post-war renovation, a section between the stations of Tisovec and Bánovo was built and removed the dead point behind the station of Tisovec. There was also a 786 metre-long tunnel. The consolidation of the rack railway finished with a complex reconstruction between 1963 and 1965. This increased the permissible axial pressure from 13 to 16 tonnes in connection with the planned use of heavier diesel locomotives. The change was useless, however, as the reconstruction was finished just when the ironworks of Tisovec, which had been the main user of the rack railway from the beginning, ceased to operate. The diesel locomotives have thus never returned to Tisovec and it was only adhesive passenger diesel trains that were used on the rack railway ever since but started to decline in importance very soon, though.

As similar rack railways in the area (Erzberg in Austria, Ózd in Hungary, Karánsébes – Subcetate in Romania) began to vanish as well, the experts were slowly realizing that the neglected rack railway could become a unique evidence of how a railway can be used in difficult mountain terrain. And this encouraged the idea of changing the well-preserved rack railway of Tisovec to a living attraction in the form of steam trains for tourists.

A significant step on the way to the new function of the rack railway was made in 2002, when two Romanian rack railway steam locomotives of the former TIVc MÁV category with inventory numbers 4293 and 4296 were obtained. They had been made by the Viennese locomotive works of Floridsdorf for the Transylvanian rack railway of Karánsébes – Subcetate in 1908 by only changing the original construction that had been created twelve years before for the rack railway of Tisovec. The similarity between the obtained rack railways and the original Slovak machines is thus no coincidence.

Afterwards, one of the locomotives was repaired in the workshops of the OKV, s. r. o. Martin company. Once the repairs as well as a detailed inspection of the whole rack railway were finished, the first rack railway steam train started to operate for the public on October 4th, 2014.

On this occasion, OZ Zubačka would like to express their sincere thanks to all sponsors and supporters. They would like to emphasize especially the contribution of Železnice Slovenskej republiky, the town of Tisovec and the Railway of Čierny Hron, n.o. Čierny Balog, as well as the help of Bode Hauswald, Georg Hocevar, Aleš Bílek, Peter Mináč, Juraj Homoľa and Tibor Karkuš.

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