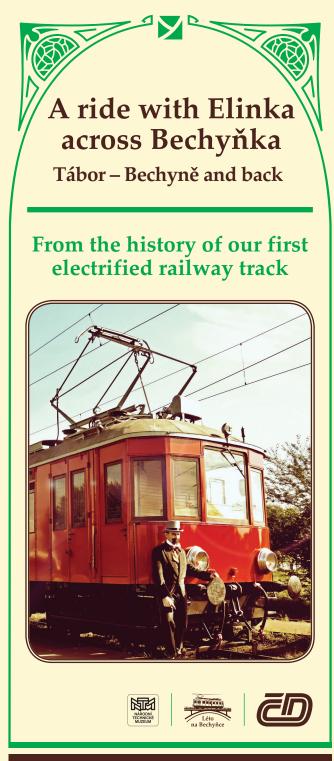
#### Railway track Tábor – Bechyně and its surroundings





KSD

There are lots of historical monuments and pieces of work in the Czech Republic, thanks to which we can admire – for decades – the brains and devotion of railway engineers and investors of the past generations. The "Bechyňka" railway track is however the winner in one respect: it was the first electrified railway line on our territory! Therefore, pay a visit to this essential historical railway corner!

#### **Past events**

In 1871, one section of Emperor Franz Joseph railway track was opened. It was connecting Gmünd with Prague via the town of Tábor. Belonging to the so-called Bohemian-Moravian Transversal Rail Line, a railway track from Tábor to Písek was completed and opened in 1889. When complete, it was connecting Jihlava with Tábor, Písek, Horaždovice, Klatovy and Brod nad Lesy and continued to the German border. The backbone line was not built, so it needed feeders also from more remote parts of this region.

In the Tábor region the areas of Mladovožicko and Bechyňsko still had to live without any railway. But one rail track was supposed to fill this gap: According to the design, it was supposed to start in Vodňany and continue via Týn nad Vltavou and Bechyně to Tábor, Mladá Vožice and Vlašim, and connect in Kolín or Kutná Hora. To make the construction of these side rail lines easier, several new acts were passed to make the railway business in the then Austria-Hungary easier. This lead to the emergence of numerous cooperatives.

The Vodňany-Tábor railway track project was rejected in 1899. Therefore, a new cooperative was set up for the construction of a rail line from Tábor via Bechyně to Týn nad Vltavou. This cooperative did not exist for too long, even though the government promised to build a track from Tábor via Bechyně to Týn nad Vltavou as the first track. A smaller track from Týn nad Vltavou to Vodňany was eventually the preferred one. When the representatives for Týn left the cooperative, the cooperative broke apart.



# How the track was founded

Another cooperative was set up in Bechyně almost simultaneously with this: a cooperative for the construction of a track from Bechyně to Tábor. It was this cooperative that managed to convince the government and the land council for the construction, also with the support of doctor František Dostál. In 1896 the track construction proposal was approved by the council and it was already certain that the long-awaited track will be built. The preliminary design was assigned to the Prague-based Köhler and Raynal design office.

All these events took place at a time when František Křižík was strenuously looking for ways how to use electric systems on the railway. And it was already in 1893 that his company designed an electric drive for the local rail line from Cártlí (Rybník) via Vyšší Brod and Lučovice (Loučovice) to Lippen (Lipno). However, there was no experience with this operation in the then Austria-Hungary, so this proposal was turned down. But the idea did not die - local entrepreneurs picked it up and started with activities leading to the construction of a local track. In the meantime, however, František Křižík was already electrifying: he was electrifying his own track from Prague, through Karlín, to Libeň and Vysočany, the ring line Prague-Žižkov–Vinohrady, street Spálená–Vyšehrad, electric city railways for the royal town of Pilsen (he took them over also for his trials with electric drives), so that he could prove that it was the desired system. As time was passing, it became clear that the system is the most suitable for tracks Svojšín-Bor and Tábor-Bechyně.

Jan Sedlák, director of František Křižík's plants, was the pioneer for the Tábor–Bechyně track. In 1898 he met the Bechyně cooperative – an association founded for the construction of the Bechyně–Tábor track – and was discussing the preparation of design. It did not take long and the Railways Ministry approved the construction of this railway track, despite the fact that conventional system, i.e. steam locomotives, were still preferred for other rail lines. Following these events, the Bechyně cooperative started negotiations about the building permit for this track. The negotiations were very complicated, because electric drives were not the usual system in these areas. The building permit was eventually granted to the cooperative on 19 April 1902. The construction completion deadline stated in this permit was the end of 1904. And the land council then cut this period to 1 June 1903.

## Construction

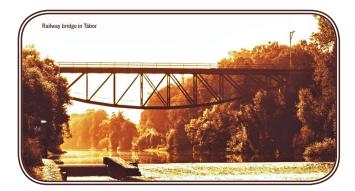
Compared with other local side tracks, certain concessions were made to the cooperative in the licence. The smallest possible bending radius was for example shortened to 125 m. Also, the so-called 21.75 kg/m rails could be used instead of the 26 kg/m rails used on other tracks. Regarding other technical parameters, the maximum speed in bends shorter than 150 m was topped at 15 km/hour, while on the other tracks coaches could go 30 km/hour. The biggest average gradient of 35 promile was approved. The track had to be adjusted to the terrain. The only short cut is only 4 m deep. It was not only these measures that helped the builders save almost 200 tonnes of steel. Even though the use of alternating current was preferred, direct current was used. The steel bridge over river Lužnice in Tábor and the power plant structure at this bridge were the most challenging structures along the entire route. The bridge is 174 m long and sits 20 m above the river. Stone for the bridge pillars was mined in stone mines Klokoty u Tábora. The total cost was CZK 2,795,000.

# **Operation and development**

The first test ride was done only after one year since construction completion: on 1 June 1903. The first official ride during the opening ceremony took place on 21 June 1903. Two electric motor coaches were first used. A third one was added in 1905 and a fourth one in 1908. These coaches were later identified as EM 400 (001, 002) and were of identical design. The third vehicle (003) and fourth vehicle (004) however had a different design. Coach M 400.001 is still operable and since 1974 it has been part of the National Technical Museum collection. Even though the identification of this coach is M 400.001, it was made by connecting to coaches – box EM 400.001 and chassis EM 400.003. This happened in the 1940s. The manufacturer of the box is Ringhoffer and the wiring system was supplied by Křižík.

In 1929 the track was extended to cover the other shore of river Lužnice in Bechyně, where the river was bridged by a new reinforced concrete bridge. The bridge was built to commemorate the 10th anniversary of the establishment of Czechoslovakia. Called the "Bechyně Rainbow", the bridge deck is shared between the railway and road vehicles.

The year 1938 is another milestone: the traction and power supply system were upgraded. On top of coaches EM 400 (Elinka), also coaches E 410.001, E 422.0 (Bobinka), E 424.002 (Bastila), E 436.0 and even a steam locomotive of series 310.0 and 423.0, and later the E 423.0 locomotives were operating on the track.



### **Technical parameters**

- Original track length 23.267 km
- New track length 24.092 km
- Number of stops and stations: 13
- Riding time: about 50 minutes