## The Ludwig Canal – a Canal Connecting Danube and Rhine

Cheers erupt as the ships pass the hundreds of people standing densely packed along the river, waving hats and handkerchiefs. They have gathered here on July 15, 1846, to celebrate one of the most extraordinary Bavarian construction projects of the century.

Of all projects initiated by King Ludwig the First of Bavaria, the canal was probably the most ambitious. By linking the Danube with the Rhine, the king wanted to create a waterway to connect Europe and its two great river systems. Starting in Kelheim, the canal was supposed to pass through Bavaria via the Altmühl river valley, past Nuremberg, and into a tributary of the river Main near Bamberg.

The groundbreaking was performed in seven places simultaneously on July 1, 1836. For a period of 10 years, ditches were dug, dams were built, and locks were constructed. Thousands of workers came from near and far. The excavated material was removed by steam-powered machinery. In terms of planning and technology, the construction of the canal was an enormous challenge and a masterpiece.

But not everyone shared the enthusiasm of the king and his master builder Heinrich Freiherr von Pechmann. Critics warned of excessive costs and questioned the canal's future usefulness. By the time the Ludwig Canal was completed, construction had taken four years longer than planned and the costs had more than doubled from originally estimated 8 to over 17 million gulden.

Nevertheless, King Ludwig the First achieved what Charlemagne could only dream of. It was now possible for riverboats to travel from the Black Sea all the way up the Danube to Kelheim. They could continue from there along the Main and then downstream on the Rhine to Rotterdam. The journey went past some of the major European cities. And everyone had to pass through Bavaria: They would increase the economic strength and carry the fame of Bavaria and its king into the world.

Not only was it possible to transport goods such as wood, grain, coal, stones, and bricks; summer visitors could also come to Kelheim by ship and admire the beauty of Bavaria. The Hall of Liberation high above the old port in Kelheim later built by Ludwig was intended as a national monument and impressive display of Bavarian glory to passing ships.

At least that was the plan. But it didn't quite work out. The canal brought in far less revenue than needed to maintain the sophisticated technology of the canal. In order to connect the Main and Danube rivers, the waterway had to cross the European watershed, which could only be accomplished with elaborate sluice systems. Between Kelheim and Bamberg, ships had to negotiate 100 locks. This cost a lot of time, particularly compared with the rapidly developing stream trains. In terms of traffic routing, flexibility and speed, the new technology quickly surpassed and outranked the canal, which was meanwhile too narrow and cumbersome to travel by.

The old canal nevertheless continued to serve as a traffic route until after World War Two, when operation was discontinued in the 1950s. In the following years, parts of the canal had to make way for a highway and the new Main-Danube Canal. Individual structures, such as locks, canal and port basins, keeper's houses, cranes, and some of the dams and bridges, were recognized as monuments in 1978. Today, the Ludwig Canal is a landmark of engineering and an important cultural monument.