

The Rendsburg High Bridge across the Kiel Canal

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Overview of the Structure

The Rendsburg High Bridge is one of the most important technical monuments in Germany and a landmark of the town Rendsburg. This older than 100-year-old bridge leads the railway line Hamburg–Flensburg (–Denmark) across the Kiel Canal. This railway line is the main line to Scandinavia, which lies under a very heavy railway traffic route. The viaduct was built between 1911 and 1913 using a design proposed by Friedrich Voß and facilitates a clear passage height for shipping of 42 m. Due to the great importance of the bridge for national and international railway traffic, the bridge is being extensively retrofitted by its owner, the Federal Water and Shipping Administration (WSV), as well as by the German railway company Deutsche Bahn (DB) (Fig. 1).

The structure was built as a riveted steel construction with an entire length of nearly 2.5 km. It consists of several parts: the main bridge and the northern and southern transition bridges. The main bridge (“canal bridge”) is situated in the middle of the structure. It has a length of 294.6 m



Fig. 1: Rendsburg High Bridge with the “canal bridge” (the main bridge, left) and the “loop bridge” (right)