

# Redevelopment - pedestrian bridge, Vechigen

2010



The pedestrian bridge near Vechigen was built in 1999. From the outside it was in relatively good condition, only the upper covers of the main girders seemed weathered and damaged.

## The project

The history As part of the planned rehabilitation of these covers, the canton had the bridge inspected in more detail. This examination of the condition showed that the main girders at roadway level had rotten spots. Various measures and methods were analyzed and calculated as a rehabilitation proposal.

## The construction method

The client finally decided to clad the main girders on both sides and to renew the connections of the roadway seals in order to achieve an up-to-date state of the art. The rehabilitation work was carried out in 2 stages. The installation of the inner cladding was carried out during the day. The outer cladding - since the bridge also crossed the RBS railroad line - was done at night. This also required the closure of the railroad line, the shutdown of the overhead line and a corresponding safety concept. To stop the fungal growth and preserve the main girders, they were impregnated by means of press injection. The expected service life of the bridge was thus increased from a few years to several decades.



Support



Pedestrian bridge before renovation 1



Pedestrian bridge before renovation 2



Support detail

### Construction Data

- Bridge length 35 meters
- Roadway width 2.10 meters
- spans 4.00 / 27.00 / 4.00 meters

### Services of Timbatec

- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Site supervision and site inspections

### Timber Construction Contractors

HORIBE AG  
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### Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, Thun  
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### Client

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