

The Werkhof of the A16 motorway, Loveresse BE

2017



Highest precision was required at the Werkhof of the A16 motorway in Loveresse in the Bernese Jura. Due to the enormous mass of the 150 meter long hall, the timber construction elements had to fit exactly.

The Project

Since 2016, the A16, the Transjurane, has connected the Swiss motorway network with that of France. For the maintenance of the southern section of the Transjurane, a large work yard near Loveresse was built, which replaces several work yards.

The Construction

The Werkhof was built as a timber structure to the energy-saving Minergie-P-Eco standard. Practically only timber from Switzerland was used. The supporting structure above the ground consists of a skeleton construction lined with timber frame elements. Supports and purlins made of glulam are arranged in three longitudinal axes. Above this, ribbed girders run in the direction of the shorter building dimensions. The horizontal stabilization is achieved by planked frame walls, which have been arranged between the columns in selected fields.

The Challenge

The Werkhof is 150 meters long and 30 meters wide. The dimensions of the building required extremely precise planning in order to compensate for any tolerances. Even slight inaccuracies can add up to deviations of several centimeters over a length of 150 meters. The timber construction elements, manufactured to the millimeter, therefore had to fit exactly onto the prepared concrete foundations. Timbatec designed the panels to accommodate construction tolerances in these elements between the main columns.

In the area of the salt storage hall, the timber supports in the hall walls had to fit into recesses with very little clearance. The recesses were measured with a tachymeter and the formwork was checked before concreting.



The Werkhof Offers Plenty of Space for Trucks, Snow Ploughs and Other Vehicles



View from the Cafeteria, the Heart of the Werkhof, into the Spacious Parking Lot



The Office Zone of the Werkhof: Timber was also Used for the Interior (Photos: Nils Sandmeier)

Construction Data

- Glulam: 1125 m³
- Frame timber: 110 m³
- Three-layer sheets: 450 m³
- OSB boards: 110 m³
- Insulation: 480 m³

Construction Costs

- BKP 1-9: 20.8 Mio
- BKP 2: 15.0 Mio
- BKP 214: 3.0 Mio

Timbatec's Services

- Preliminary project
- Estimated cost
- Construction project
- Fire prevention
- Site inspections
- Statics/Design
- Text for tender
- Implementation project
- Construction management

Timber Construction Engineer

Timbatec Holzbauingenieure Schweiz AG, Bern
3012 Bern

Timber Construction Company

PM Mangold Holzbau AG
4466 Ormalingen

Construction Management

Tekhne SA
1003 Lausanne

Architectural Engineer

Schnetzer Puskas Ingenieure AG
3011 Bern

Building Owner

AGG Amt für Grundstücke und Gebäude des Kantons Bern
3011 Bern

Architect

Claudia Meier & Markus Bachmann / MBAA
8004 Zürich