New construction of a roof for the Brünnli ice rink, Hasle b. Burgdorf

2005

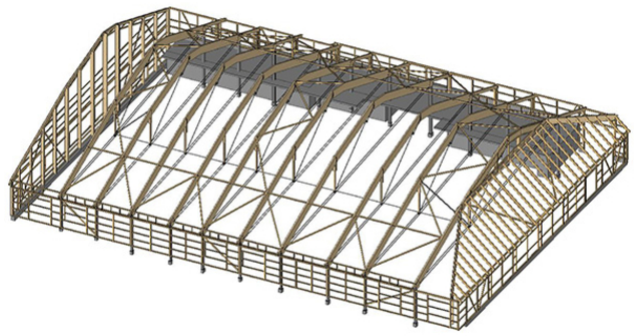
A roof for the previously open ice rink was to be built over the existing civil defense facility. The building lines allowed hardly any leeway in the design of the roof shape. Limitations had to be observed not only in the ground plan, but also in the section.

The project

The aforementioned constraints led to the chosen structural form with a truss spacing of 5.20 - 7.00 m.

The construction method

The trusses are designed as an underbraced, buckled 3-hinged frame, which is additionally extended on one side by a post and bracing. This allows the bending moments in the stem to be reduced. The secondary structure consists of rafter purlins designed as Gerber girders. The trusses stand on clamped steel supports; the roofing was made of corrugated sternite.



View of the base components

Setting up the binder

Binder

Detail

Construction Data
- Total 260 m^3 Wood
- Hall: 48 x 60 m
- Height ridge: 13.6 m
- Useful area: 2'880 m^2

Services of Timbatec
- Condition analysis
- Inspection and monitoring

Timber construction**contractors**
Zimmerei Kühni AG
3435 Ramsei

Timber construction engineers
Timbatec Holzbauingenieure Schweiz AG, Thun
3600 Thun

Engineering Office Foundations
Kohler und Schöni Ingenieure AG
3415 Hasle

Client
Sportbetriebe Brünnli AG
3415 Hasle-Rüegsau