



Project Information

Builder-Owner

Wagner GmbH, Nüziders

Location

Nüziders

Completion

2014

Project facts

NGF 1.109 m², BGF 1.769 m²,

BRI 6.659 m³

Energie 37,4 kWh/m²a

Architecture that reflects the values of the company: efficient, innovative and precise.

The company Wagnertec, in Nüziders, manufactures chrome components for plant engineering, energy suppliers and building services. In order to enable the future development of the business, the administrative department needed to expand.

A solution has to be found that can offer agility for future company growth, that works around the existing buildings and their ongoing operations efficiently, and that can be precise and fit for purpose.

»We wanted to take a step back to the roots of timber construction while exploring innovative prefabricated methods. For us the result is a rewarding, new direction in hybrid timber construction. This project has conclusive benefits: it combines the advantages of prefabrication with the freedom of design.«

DI Christoph Dünser

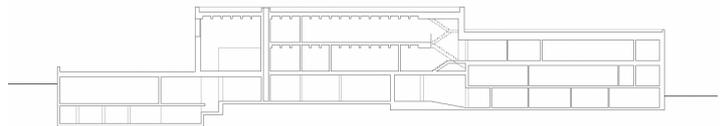
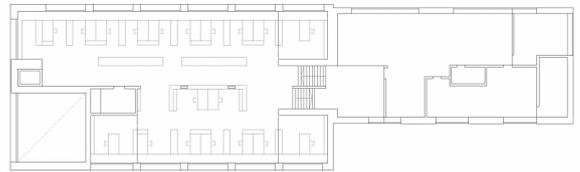
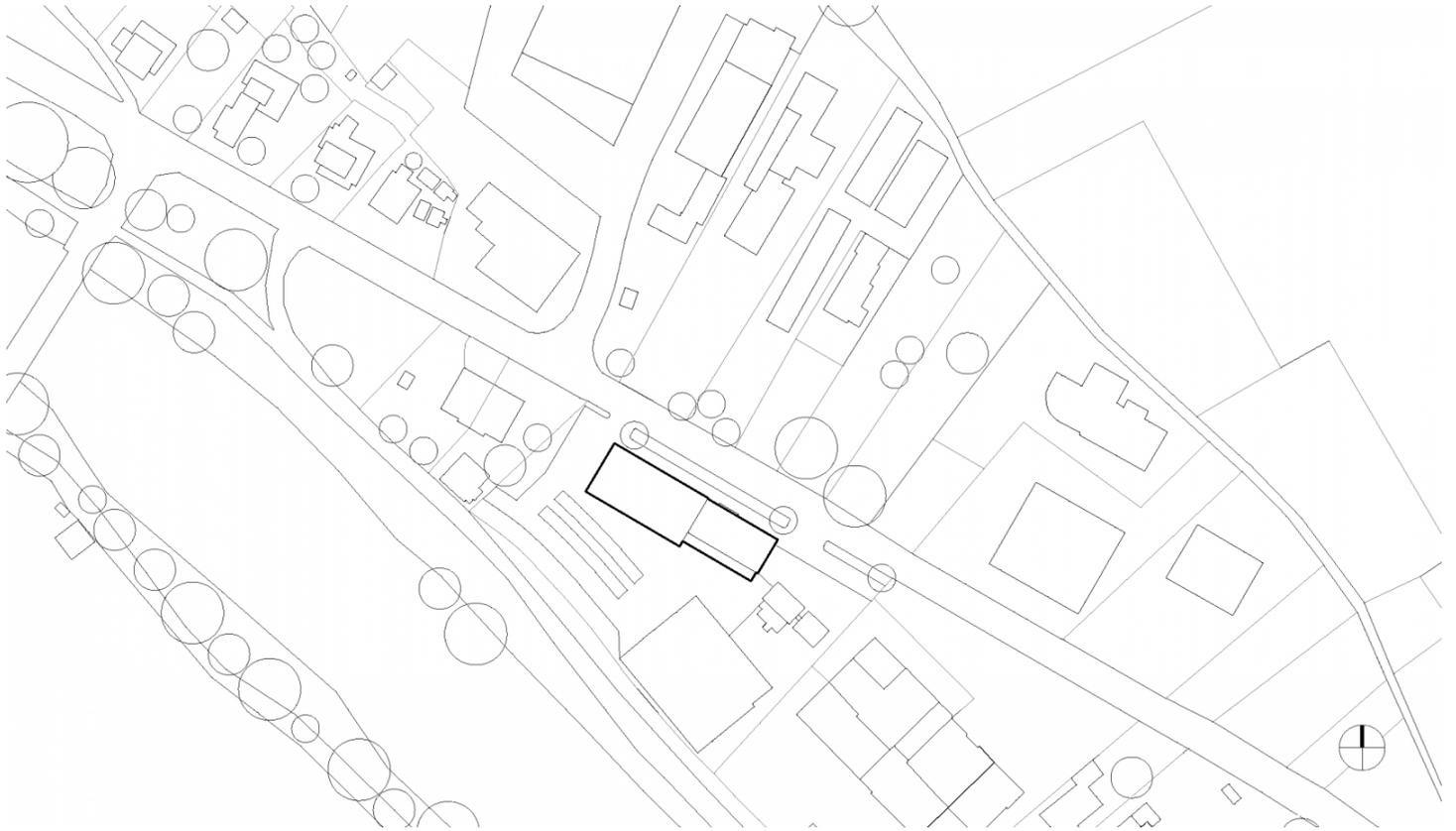
The annex in Nüziders combines spacious rooms with an efficient construction and individual extension by using the LCT modular system. The novel combination of prefabricated timber girders and concrete slabs solves the requirements of this project elegantly and appropriately. The construction process was simplified, the flexibility of the design optimised and the results are a rewarding new direction for hybrid timber construction, and one that satisfied the builders and the planners.

The two building materials work together optimally: wooden beams are loaded on the underside of the ceiling with tension, while the concrete on the upper side absorbs the pressure. Thanks to the addition of 1% polypropylene in the concrete ceiling, the fire protection is guaranteed, even if the entire construction is open and visible. The wood serves as the structure while simultaneously forming the interior. This makes the system efficient and the timber hybrid solution competitive compared to other building materials.

The façades consist of prefabricated elements that have been placed in front of the supporting structure, sitting between the pairs of columns. At the request of the client, a ventilated exposed masonry finish was created for the shell. The insulation consists of mineral wool. The clinker from the Netherlands offers an easy-care outer skin, and combined with the window reveals, made of chrome manufactured by Wagnertec, the result is both robust and resilient. A special feature is the large office windows, which manage without any ventilation wings. Inside, wooden surfaces dominate with sawn beech wall cladding and bespoke solid beech furniture. The ventilation integrated in the balustrade is also clad in sawn beech. For the floor, in the corridors, a stone was used, in the offices due to the acoustic carpet tiles.

The space programming of the extension included, on the ground floor, a reception, a large meeting room, an open-plan office and miscellaneous service rooms. The second floor was also built, but remains unused at present, and the option is available for a third floor to be built when the company requires yet more space to support its growth.





Project Stakeholders

Project Leader

DI Stefan Hiebeler

Colleague

DI Christoph Dünser

Ing. Benjamin Baumgartl

DI Ann-Katrin Popp

Cost Planning

Bmst. Gerold Hämmerle

BM DI Eugen Keler

Building Site Manager

Bmst. Gerold Hämmerle

BM DI Eugen Keler

Wolfgang Hammerer

Project Stakeholders

Structural Engineering Timber Construction

SWG Schraubenwerk Gaisbach GmbH, Geschäftsbereich Engineering, Henning Ernst, Waldenburg

Structural Engineering Concrete Construction

DI Gantner Christian, Bludenz

Heating Ventilation and Sanitary Planning

Wagner GmbH, Nüziders

Electronics Planning

elplan Lingg Elektroplanungs GmbH, Schoppernau

Building Physics

Thomas Schwarz - WSS,

Wärme- & Schallschutztechnik

Schwarz, Frastanz

System development of thermally activated insulation

Cree GmbH, Dornbirn

Awards

Holzbaupreis Vorarlberg 2015 (Auszeichnung Holzmischbauweise)

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