



Project: Cantonal Hospital St. Gallen

Bimplus by ALLPLAN in practice

COMPREHENSIVE WEB-BASED COORDINATION

"We use Allplan Bimplus because we want to deliver good projects to our customers."

The work of the WaltGalmarini AG engineering office can be recognized in many buildings. In Zurich alone, for example, the Letzigrund Stadium, the Primetower, the Toni Areal or the new elephant enclosure at the Zurich Zoo all bear the company's signature. The company aspires to hand over to its customers high-quality buildings that offer them a lasting and good experience. For their next projects, customers should want to turn to the engineering firm again with confidence. WaltGalmarini AG pursues this aim with an integral approach. They do not want to be involved in projects as specialists, but rather they would like to be able to incorporate their expertise into the overall project: from the strategic considerations to the execution. Digitization plays an important role in this aim. This is exactly why the engineering office worked with a web-based openBIM solution – Allplan Bimplus – for a current project: the "Haus 10" at the Cantonal Hospital St. Gallen.





Allplan Bimplus BIM Explorer allplan.com/bimplus

THE CHALLENGE

The Cantonal Hospital St. Gallen is being expanded. This affects several buildings. The entire project has a total construction cost of 587 million Swiss francs. The expansion will be built in two different planning and construction phases. The first phase: "Haus 10." This serves as the staff offices for the main reconstruction of the hospital and is located in the former parking area of the Böschenmühle, which was partially demolished. The six-story building – with a ground-plan area of 56 by 17 meters – is connected to the hospital courtyard by an aerial walkway. This aerial walkway bridges both the distance as well as the level difference between Haus 10 and the hospital courtyard.

The building was planned by a team around Walt– Galmarini AG, Amstein + Walthert AG as well as the architects Fawad Kazi Architect GmbH. "We did not have a contractual requirement from the client to plan this project with BIM," says Andreas Haffter, project manager and BIM manager of WaltGalmarini AG, "but due to the size and complexity of the project, this was obvious to us; also because quality assurance was important to us and we wanted to document the model comparisons."

- > Easily bring models together, view and review them
- Document quality assurance and model comparisons
- Centrally store and access data even while on the go

"BIM is nothing new for us. We have been working this way for many years already," says Christian Mathies, design engineer at WaltGalmarini AG. "With this project, we did not just want to do it internally, but also wanted go out there and collaborate. We asked ourselves how we can easily bring models together so we can view and review them. We wanted to know what the engineers have and what the architects, company technicians and designers need – and what we need to adjust. Every single project participant should be able to store data centrally, even while on the go, and also access this data in the same way. We were therefore looking for a web-based coordination tool."



Allplan Bimplus, the central web-based coordination platform

THE SOLUTION

"Allplan Bimplus was the only web-based coordination tool that we could find at the time," says Christian Mathies. "In my opinion, this is the future and many people will jump on this bandwagon. Since we were already working with Allplan, it made sense to use their products. In discussion with other planners, we made an evaluation and ultimately decided to use this openBIM platform."

WaltGalmarini AG gained its first experience of using this openBIM solution with the "Haus 10" at the Cantonal Hospital of St. Gallen. "We executed the tasks, made cuts, wrote comments and the tree structure within the individual models and building structure was helpful for us. We were thus able to go through the building floor by floor and coordinate in detail, "says Andreas Haffter.

After the shell of Haus 10 was completed without significant problems during construction, Christian Mathies and Andreas Haffter can offer confirmation from the support structure planning side: the process worked. In total, twelve planners and coordinators worked with Allplan Bimplus. Other planners could have used the platform, but for various reasons did not, including because they lacked the understanding for it. "Andreas Haffter had a very good grip on it and used it very extensively," explains Christian Mathies. "He was able to show the advantages, thus motivating people to actually use the platform. The project was ultimately also successful thanks to him." With the project completed, the foundation has now been laid to be able to start with the main construction of the cantonal hospital St. Gallen by the end of 2017. Planning is underway and the indepth coordination with BIM will start soon.

Client: Cantonal hospital St. Gallen and Children's Hospital of Eastern Switzerland St.Gallen KSSG–OKS **Project Manager:** Hämmerle + Partner GmbH, Zurich

Architect: Fawad Kazi Architekt GmbH, Zurich Civil engineer: WaltGalmarini AG, Zurich Building technology: Amstein + Walthert AG, Zurich

- > Allplan Bimplus was the only web-based coordination tool that we could find.
- > Twelve planners and coordinators worked with Allplan Bimplus.
- > Apply tasks, create sections, write comments and orient yourself to the structure tree: this is how the building could be passed through and meticulously coordinated floor by floor.



Andreas Haffter and Christian Mathies gained their first experience of using Allplan Bimplus with the Haus 10 project at the Cantonal Hospital of St. Gallen. We executed the tasks, made sections, wrote comments and the tree structure within the individual models and building structure was helpful for us. We were thus able to go through the building floor by floor and coordinate in detail.

THE ENGINEERING OFFICE

WaltGalmarini AG deals with design and project planning, project and site management as well as studies and research. Their core expertise includes building and bridge construction, complex underground works, structural engineering and material technology. The company prefers to offer its customers complete packages so that they only have a single contact. In order to provide such complete packages, the engineering firm is now working with Allplan Bimplus. WaltGalmarini AG is an international engineering firm and employs around 45 workers at the Zurich location, including engineers and designers. Andreas Haffter is a member of the engineering team. As a Msc ETH Bau–Ing., he works as a project manager and BIM manager at WaltGalmarini AG. Christian Mathies is a design engineer and vocational trainer at the company. The two of them dealt extensively with the project and with the web–based platform, Allplan Bimplus.

ABOUT ALLPLAN

ALLPLAN is a global provider of BIM design software for the AEC industry. True to our "Design to Build" claim, we cover the entire process from the first concept to final detailed design for the construction site and for prefabrication. Allplan users create deliverables of the highest quality and level of detail thanks to lean workflows. ALLPLAN offers powerful integrated cloud technology to support

ALLPLAN Inc.

10 N. High Street, Suite 110 West Chester, PA 19380 Phone 1-844-425-5752 sales.us@allplan.com allplan.com interdisciplinary collaboration on building and civil engineering projects. Around the world over 500 dedicated employees continue to write the ALLPLAN success story. Headquartered in Munich, Germany, ALLPLAN is part of the Nemetschek Group which is a pioneer for digital transformation in the construction sector.

