



District Police Building (c) Tecklenburg

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From Zero to BIM Champion: Contractor Tecklenburg Builds District Police Building in Record Time

Munich / Bergheim, July 13, 2023 - Tecklenburg succeeds in the digital transformation from a traditional construction company to an award- and prize-winning BIM specialist with software solutions from the Nemetschek Group. In a construction project put out for tender throughout Europe, Tecklenburg was able to prevail over all competitors thanks to its expertise, and implemented the project on time and within budget.

Tecklenburg is a sixth-generation building contractor, successful since its

inception in 1878. Its fields of activity include public building projects such as police buildings or daycare centers, neighborhood developments, food markets, and private and terraced houses. The Tecklenburg Group acts as investor, project developer, and general contractor in construction projects. In addition to Managing Director Hermann Tecklenburg, Martina Voss-Tecklenburg, coach of the national women's soccer team, is also a shareholder of the Tecklenburg Group.

As Managing Director, Hermann Tecklenburg has always been innovative and willing to permanently develop the company. That is why he decided to introduce Building Information Modeling (BIM) three years ago. The goals were to accelerate planning phases, to be able to identify and correct errors in advance, and to work more efficiently. In addition, model-based working is a mandatory prerequisite for participating in tenders for public buildings. Ultimately, BIM makes a construction company more competitive.

One important decision was to specify the BIM tools to be used by external planners, architects, and construction companies. Those who want to be subcontracted by Tecklenburg must, for example, work with the Nemetschek brands [Solibri](#) and [Allplan](#). However, the connection to other software solutions is possible thanks to OPEN BIM.

60 percent of the entire planning completed in Allplan

The advantages of using BIM solutions from Nemetschek became apparent immediately in the first major BIM-supported construction project: the construction of the district police building in the Rhine-Erft district in North Rhine-Westphalia. Tecklenburg used BIM applications in all project sections and departments: architecture, building physics, structural design, precast plants, building services, costing, construction, and facility management.

60 percent of the entire planning could be done in the planning tool Allplan alone, including the necessary costing and billing. This has led to a shorter planning phase with significantly fewer working hours. Without BIM, three times the time and effort would have been required to design the building.

A major advantage of BIM for the entire company is transparency and cross-departmental exchange. This allows sales and costing to see how costs develop over the course of the project and to adjust and optimize their costing for further projects.

7,800 collisions found in advance with Solibri and resolved semi-automatically

Tecklenburg relies on Solibri for identifying errors, checking compatibility, and detecting collisions. These quality assurance measures lead to significant cost savings because they avoid changes, construction delays, and the unnecessary consumption of resources. As a result, Tecklenburg was able to find and resolve 7,800 collisions during the planning phase – before they led to costly delays on the construction site.

The collision checks don't even have to be created, because Solibri Office already comes with a library and predefined check rules that can be combined and parameterized as desired. A ticket system is connected to Solibri in order to digitally manage and process quality improvements.

In addition, Solibri was also used to compare different design versions and for extensive data analyses.

Completion in the middle of the third quarter of 2023

The complete digital planning and control of the construction project could be realized without delays thanks to the corresponding BIM tools in close coordination with the police. As contractually agreed, the building will be handed over in the middle of the third quarter of 2023. The costs also remained within the specified framework – which is typically not a matter of course for public projects.

"Thanks to the strategically and conceptually mature approach and the use of Nemetschek's professional BIM tools, we can hand over the newly constructed building to the district police authority on time. Our client very much appreciated the fact that he was always transparently informed about the status and the next steps," says BIM manager Manjunath Ambli-Suresh, summarizing the project.

Detlef Schneider, CEO of ALLPLAN said: "The use of various BIM tools along the building life cycle of Tecklenburg shows how construction companies can gain security, save costs, and work much more efficiently. In particular, thinking in workflows – instead of silos – significantly increases transparency, collaboration, and thereby efficiency," Ville Kyytsönen, CEO of

Solibri, adds, "It's great to see how a traditional company like Tecklenburg serves as a pioneer for the digital transformation of the industry."

Hermann Tecklenburg confirms: "For us, introducing BIM right from the start of a major construction project was a gamble, which has been completely worthwhile. As a group of companies, we benefit enormously from the new digital possibilities and are thus able to win new, large construction projects and implement them without delays."

About the Nemetschek Group

The Nemetschek Group is a globally leading software provider for digital transformation in the AEC/O and media industries. Its intelligent software solutions cover the entire lifecycle of building and infrastructure projects and enable creatives to optimize their workflows. Customers can design, build, and manage buildings and infrastructures more efficiently and sustainably and develop digital content such as visualizations, films and computer games more creatively. The software provider is driving innovations such as digital twins as well as open standards (OPEN BIM), and sustainability in the AEC/O industry, constantly expanding its portfolio by also investing in deep-tech startups. Currently more than seven million users worldwide are shaping the world with the customer-focused solutions of our four divisions. Founded by Prof. Georg Nemetschek in 1963, the Nemetschek Group today employs around 3,600 experts globally.

Publicly listed since 1999 and quoted on the MDAX and TecDAX, the company generated revenues amounting to EUR 801.8 million and an EBITDA of EUR 257.0 million in 2022.

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