



MAN East Gate Plant Development, Munich, Germany

pmp Architekten GmbH, Munich, Germany

A new gateway to the world

MAN Nutzfahrzeuge AG in Munich-Allach has received a complete facelift as part of the “East Gate Plant Development” project. This includes modern showroom/distribution buildings as well as administration blocks, training centres and car parks. The company pmp Architekten GmbH took on the role of general planner and used Nemetschek Allplan’s integrated solution to efficiently plan, coordinate and implement the project.

The headquarters of MAN Nutzfahrzeuge AG Munich, the biggest individual company of the MAN AG group, had been in urgent need of modernisation. “In the old building complex in Munich-Allach, which was originally acquired from BMW, there was a major backlog with regard to new innovation,” explains Johannes Probst, project manager for the MAN project and co-founder of pmp Architekten. The company therefore decided to initiate the “MAN East Gate Plant Development” project and chose pmp Architekten as the general planner. The new complex to the east of Dachauer Straße comprises eight buildings, each of which was essentially treated as a separate project: these include two administration blocks located either side of the plant access road (one to the north and one to the south). Behind these, there are two training centres: the Service Academy and the Management Academy. Two showroom/distribution buildings have also been built to the west of Dachauer Straße (the MAN Forum and the Neoplan Forum) while two car parks with approximately 1,200 parking spaces complete the “East Gate” construction project.

One point of contact for all areas

Munich-based pmp Architekten, which considers itself to be a “broad-range provider”, first came on board in 2005 after being awarded the contract for the design of the distribution building and its subsequent implementation. Two years later, pmp Architekten decided to compete in a second tender procedure regarding several new buildings, including the main administration blocks. Over the next five years, the “East Gate Plant Development” evolved into a project worth over 90 million euros in total and was completely in the hands of pmp Architekten.

A particular aspect of this project is that MAN Nutzfahrzeuge AG wanted to work with the minimum possible number of contacts and ideally with only one contact for the entire planning process. So, Bilfinger Berger took on the role of general contractor while pmp Architekten became the general planner and thereby also assumed responsibility for controlling and coordinating the entire contract. Johannes Probst explains, “For this, we needed a universal system capable of depicting all work phases in a consis-

tent manner. From my point of view, Allplan from Nemetschek is the most suitable software on the market that best meets these requirements. Without Allplan, it would not have been possible to process such a comprehensive project in such a short time frame and under such enormous cost pressure.”

As the general planner, pmp Architekten was responsible for a wide variety of tasks which, in addition to architectural services, also included the entire structural design as well as the planning of all building services equipment and external works. Furthermore, the Munich-based architects also provided all the consultancy work with respect to structural physics and fire prevention. For a few tasks, however, pmp Architekten relied on subcontractors, including Unterschleißheim-based company Bauer for the building services, Erding-based company Wieder for the electrical work, Stockdorf-based Maurer for the external works and Munich-based statics experts Behringer.

Effective tools for project organisation

Overall, about 100 employees in seven offices needed to be managed over the course of several years – this called for organisational excellence. As regards the software, pmp Architekten was extremely well-equipped to fulfil this task: in total, the architectural firm worked very effectively with twelve Allplan licences (eight for Allplan Architecture and four for Allplan Design) thanks to the licence server. The server ensures that Allplan licences are used efficiently, both online in the network and offline, as required, for out-of-office work.

The Workgroup Manager allows several users to work on the same project simultaneously and ensures that all participants are provided with data of the same status. “For us, this was the optimal solution. It gave us the flexibility we needed to manage a project as comprehensive as the East Gate Plant Development,” asserts Johannes Probst.

Another of Allplan’s key strengths, according to Johannes Probst, was the modeller tool for free 3D modelling in Allplan. “We relied on this tool in all planning phases and it really proved its worth during this project,” claims the architect.



2D versus 3D – the right solution for every task

Johannes Probst follows the rule of thumb that the more complicated the layout, the simpler and clearer it is in 2D. Hence construction documentation and detailed planning at pmp Architekten are usually completed in 2D for the most part. Certain geometrically or structurally complex aspects, however, are often better rendered and checked in 3D. An example of this can be found with the oblique-angled geometries and various distortions of the MAN project Forums in particular. For these elements, the team at pmp Architekten found that working in 3D was particularly beneficial. The same applies for the construction plans: 3D plans were preferred for the shell construction, while the detailed schematic diagrams were created for the most part in 2D. The fact of the matter is that it is crucial for architects to be able to switch freely between 2D and 3D in order to be able to exploit the best method of working for any given task.

Thanks to the flexibility of this CAD system and efficient project organisation using the Workgroup Manager and licence server, the Munich-based architectural firm managed to successfully complete the “East Gate Plant Development” project. And, despite the contracts being some three years apart, the buildings blend together to form one harmonious ensemble with a common architectural signature.

Project data:

Administration blocks:
Gross floor area: 15,780 m²
Gross volume: 43,610 m³
Main effective area: 8,290 m²

Academies:
Gross floor area: 6,420 m²
Gross volume: 28,010 m³
Main effective area: 3,330 m²

Forums:
Gross floor area: 15,240 m²
Gross volume: 101,200 m³
Main effective area: 10,590 m²

Carparks:
Gross floor area: 30,840 m²
Gross volume: 88,270 m³
Parking spaces: approx. 1,200

