

SPREESPEICHER

Although the design has echoes of old Speicher buildings, the latest technology has been used for the design, construction, and operation of the Neue Spreespeicher complex: 3D modelling, model presentations, right through to the use of 3D data for the building services.



Client	Cuvrystrasse 50-51 Berlin GmbH	Dimensions	39,192 m ² gross floor area, approx. 400,000 m ³ water pumped out, 8 storeys above ground and 1 basement level, 6 building sections, 1 multi-level glass atrium, 1 internal courtyard with publicly accessible green spaces
Location	Berlin	Certification	DGNB Gold
pde period of service	2017-2019		
Completion	03/2021		
Work stages	Basic fit-out: work stages 5 + 6, tenant fit-out: work stages 3+5		
Service areas	Planning, sustainability, LEAN, BIM		



INTERPLAY OF TRADITION AND MODERN DESIGN

The Neue Spreespeicher project, set in a location with a rich history on the former East-West German border, can claim a long history of its own. Shortly after planning permission was obtained in 2002, the empty site was occupied by squatters and became a tent village for several years. Following lengthy negotiations, an agreement was reached and the land became available again as a construction site. The project to build a new, modern office complex then took off rapidly.

In July 2017, PORR became the main contractor for the building contract, which is worth over EUR 46 million. pde was awarded the general planning contract, guaranteeing smooth collaboration and enabling the project to get off the ground without delay. Building information modelling (BIM) has become standard at pde and was used to get interfaces set up rapidly and to quickly identify and clarify open questions. The BIM techniques were complemented with LEAN Design, which helped ensure direct information exchange and efficient project execution.



Scan the QR-Code and have a look at the 3D-Model

It wasn't just the PORR internal teamwork and exchange that was important to this project: open cooperation with the future tenants was also vital, as there were diverse requirements derived from the mixture of services and gastronomy areas on the ground floor and office spaces in the upper floors. To ensure the best set-up for the future rental spaces, all these requirements had to be taken into account during design and execution. For example, during execution planning, the team had to reconcile requirements for sufficient building service shafts, the provision of meeting areas on the ground floor, and the resulting larger sprinkler system.



FIRST-CLASS PERFORMANCE UNDER WATER AS WELL AS ON DRY LAND

The Neue Spreespeicher stands right on the bank of the River Spree, and this watery location presented some unique challenges for design and construction. "While for Berliners the waterside is a pleasant promenade with local recreation areas, the location poses a challenge for our planning team", explains project manager Susan Schönbauer. The first special measures were needed to begin work on the site: a comprehensive dewatering system for the construction pit had to be put in place.

While setting up the site, we pumped around 400,000 m3 of water off the site and back into the Spree. The basement level then had to be built in the construction pit as quickly as possible, to keep the dewatering time down.

Susan Schönbauer, pde integrale Planung GmbH

Another special feature of the project was the use of professional divers for various underwater tasks. Fully equipped and clad in their drysuits, the professional divers leapt boldly into the Spree to burn off the sheet-pile wall, install barriers for the inflow structure, and create the facade connections under water.