

# Boehringer Ingelheim LSCC+QC

## Data and facts

Company	PORR Verkehrstechnik GmbH
Type	Special civil engineering
Runtime	03.2017 - 10.2017
Principal	Boehringer Ingelheim RVC GmbH & Co.KG

[Project report online](#)

[www.porr-group.com](http://www.porr-group.com)



# Specialist civil engineering in a class of its own

In the area close to the tunnel, the construction pit system was realised with a 40m-deep secant pile wall with a diameter of 120cm. Several piling rigs were used to compensate for the additional time required. In areas further away from the tunnels, the construction pit was secured with an up to 35m-deep diaphragm wall measuring 80cm thick. In addition to the construction pit enclosure comprising diaphragm and bored pile walls, more than 500 deep foundation elements were installed to depths up to 45m. As conventional anchoring systems were not possible with the Lainz Tunnel running through the site, the construction pit was established using the cut-and-cover method. In the installation of the steel auxiliary supports for the construction pit, PORR impressed with an innovative proprietary development that combined time efficiency and sufficient positional and depth accuracy

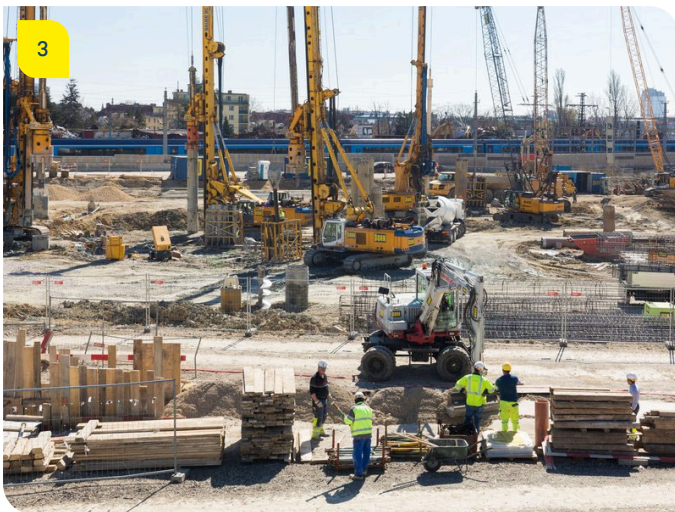
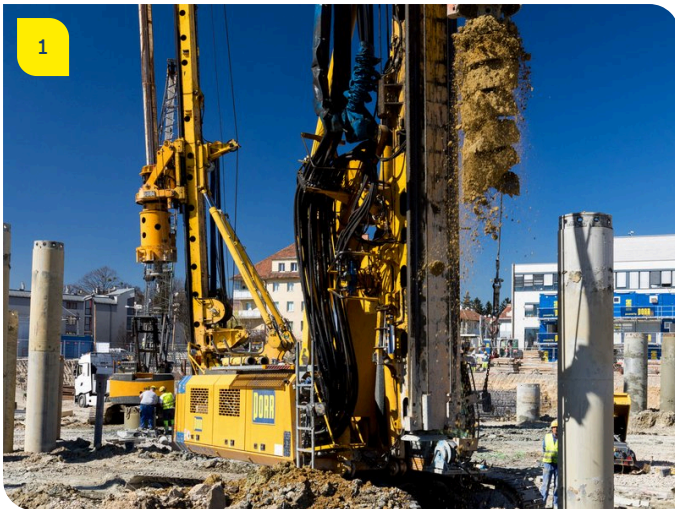
The groundwater control measures, with ongoing monitoring of water levels inside and outside the construction pit, comprised around 20 sampling and absorbing wells as well as a control gauge. In addition to lowering the groundwater, this also involved depressurising groundwater horizons under artesian pressure at depths in excess of 25m below ground level.

## An outstanding achievement

The new plant was scheduled to be used to produce pharmaceutical products with cell cultures from 2021, so the construction schedule was exceptionally tight. However, thanks to its extensive portfolio and excellent cooperation between different departments, PORR was able to offer a solution to this extremely complex challenge within a very short period of time, providing everything from a single source. In addition to deploying a considerable number of employees, PORR also used six piling rigs and five cable excavators – a uniquely high concentration of specialist civil engineering equipment on one site. All work was completed on schedule, meaning that 2021 went down as a milestone year in the history of Boehringer-Ingelheim.



# Impressions



## Image notes

1

Construction pit secured using two different techniques.

The section of the construction pit in the vicinity of the Lainz Tunnel was secured with a secant pile wall to reduce the vibrations.

3

Think Big.

A unique concentration of heavy-duty specialist civil engineering equipment made it possible to meet the tight schedule.

2

A major investment secured with specialist civil engineering.

Further away from the tunnel, the construction pit was secured with a diaphragm wall.

Do you have questions about the project or would you like to learn more? Feel free to contact us for further information.

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