

Höchst Industrial Park, Frankfurt am Main

Data and facts

Company	PORR Spezialtiefbau GmbH
Туре	Foundations
Runtime	06.2020 - 07.2020
Principal	Lyondell Basell

Project report online



Successful foundation works despite obstacles

In view of the expectation that some areas would be contaminated, the team decided to use Fundex displacement piles in accordance with DIN EN 12699 for the foundations, as no soil is extracted with this method. Limited space and existing supply lines also necessitated a particularly cautious and foresighted working method. In the northern section of the construction site, for example, where the new structure came close to an existing building, piles were inserted into a gap between pipe bridges and hydrogen tanks. Plenty of experience and sure instincts were required to successfully operate the large drilling equipment in these circumstances. Pile manufacturing works were conducted in parallel with exploratory drilling, which meant that working routes, storage areas and surveying markers had to be precision planned in a limited space.

Contact drilling to explore old foundations

A total of 197 contact drilling holes were bored before works began, in order to establish the location of any old foundations. Once the pile layout had been adapted accordingly, pile insertion points for rubble clearance drilling were determined. Solid obstacles cannot be penetrated during the manufacture of displacement piles, so the up-to-5m-thick reinforced concrete foundations located within the site soil had to be pre-drilled with a separate apparatus. In addition, the site soil was found to be extremely abrasive and heterogenous. A workshop was erected on the site for the maintenance and preparation of drilling equipment, to avoid any delays resulting from increased wear of the equipment.

Impressions



Image notes

1

Industriepark Höchst, Frankfurt am Main

The team installed 182 Fundex piles with a diameter of 44/56 cm on time and to the highest quality for the pile foundation for an extension.

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

PORR AG Group Communications

Absberggasse 47 1100 Wien

T +43 50 626-0

E-Mail: comms@porr-group.com