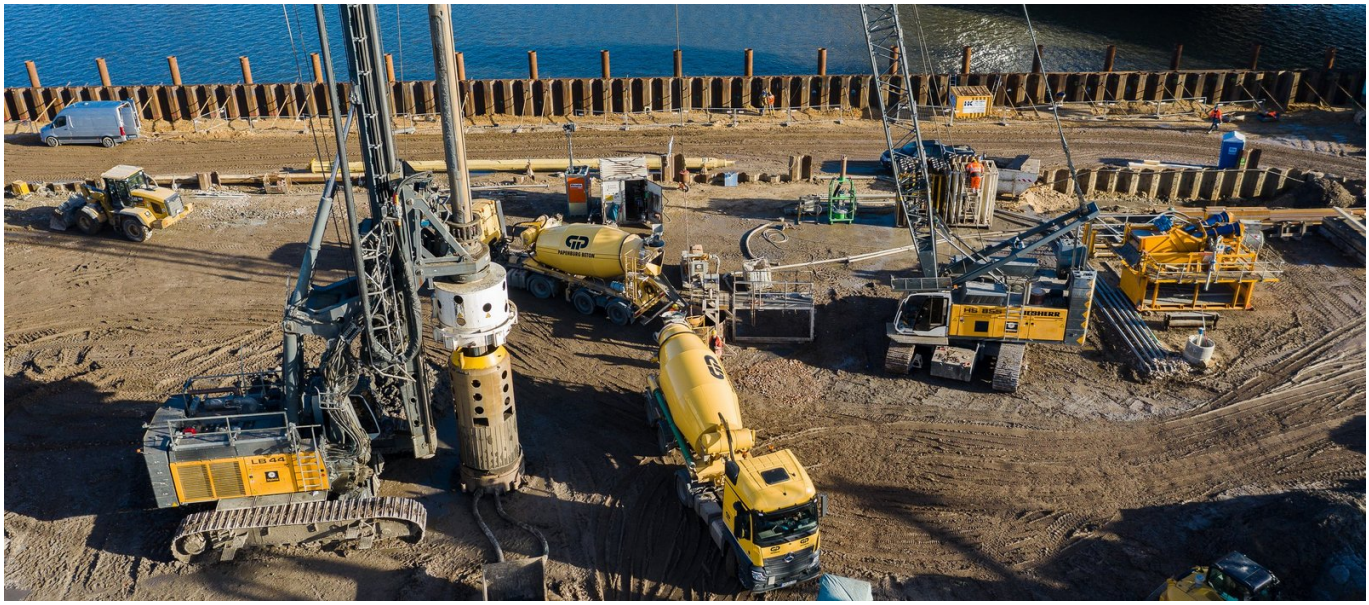
Implenia

Reference

Elbtower Hamburg (ETH)



SHORT DESCRIPTION

The Elbtower Hamburg excavation and foundation consortium was awarded the contract for the construction of the excavation for three basement levels and the deep foundation of the Elbtower in Hamburg, a 245-meter-high, architecturally sophisticated building on the eastern edge of the Elbbrücken district near HafenCity.

THE PROJECT

For the construction pit lining, 18,000 m^2 of cut-off walls with an inserted sheet pile wall and 4,700 m^2 of slurry wall and its multi-layer back anchoring are being constructed on an area of around 21,000 m^2. In the Oberhafen Canal, a back-anchored, pressed-in sheet pile wall with dolphins secures the dismantling of the old quay wall.
The 245-meter high-rise is founded on 63 large-diameter piles with a diameter of 200 cm and a length of 75 m. Since the working level is at ground level, the average drilling depth is 83.2 m per pile. The piles are installed using a partial casing with suspension support. For the other building sections, around 1600 partial displacement piles and 140 micropiles will be sunk.
Further services include the installation of 340 semi-permanent anchors, some of which are up to 41 m long Multibond anchors, 130,000 m^3 of soil excavation and disposal, demolition of an old quay wall, construction of 18,000 m^2 of subbase layer, water drainage.

FACTS

Location	Zweibrückenstraße 13b, Hamburg , Germany
Status	completed

Construction volume (value of our services)	45.81 M EUR
Start of construction	January 2021
Completion	March 2024

SERVICES

Special Foundations