



New construction to replace the Main Bridge, Mainflingen

Data and facts

Company	PORR Spezialtiefbau GmbH
Type	Foundations, measurement technology
Runtime	02.2022 - 05.2022
Principal	Die Autobahn GmbH, NL Nordbayern

[Project report online](#)

www.porr-group.com



Extraordinarily high test loads of up to 25MN

through settlement-prone tertiary clays and sands to sands with sufficient load bearing capacity, these last located at depths ranging from approximately 25m to 50m. The columns must therefore be built on large-scale bored pile foundations extending approx. 50m into the soil, in order to reach the bedrock far below.

Perfect cooperation between all competence areas

To ensure the load bearing capacity and settling process are satisfactory, the team used cased and slurry-supported reaction and testing piles with diameters of 1,200mm and pile lengths of up to 50m to conduct two static pile tests involving test loads of up to 25MN. The presence of an approx. 26m-thick clay layer interspersed with timber and coal remnants necessitated constant quality control to prevent any untoward reaction with the bentonite slurry used in the process. The bentonite was adapted precisely to suit the geology of the site in the construction site laboratory. Once the piles had been manufactured and cured, the test piles were subjected to test loads between up to 25MN and a breaking load – a situation that called for experts in measurement technologies. The employer was very pleased with the results, as was branch manager André Schürmann: “It is an invaluable advantage, on this kind of ambitious project, for various competence areas – from planning and quality control to civil engineering and measurement – to be able to work together seamlessly.”

Impressions

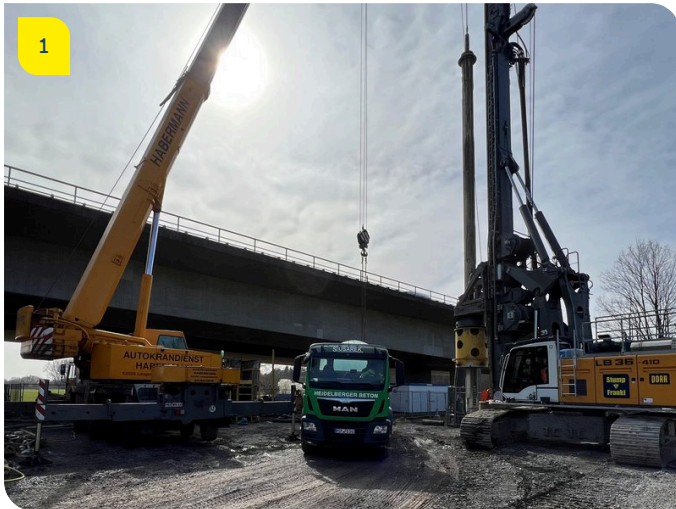


Image notes

1

New construction to replace the Main Bridge, Mainflingen

To ensure the load bearing capacity of the deep pylon foundations was sufficient, Stump-Franki worked under contract to Autobahn GmbH North Bavaria to conduct test drilling procedures for the new bridge.

2

To ensure the load bearing capacity and settling process are satisfactory, the team used cased and slurry-supported reaction and testing piles with diameters of 1,200mm and pile lengths of up to 50m to conduct two static pile tests involving test loads of up to 25MN.

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