

Building a New Kindergarten: More Space to Play and Run Around

Foundation of a ground slab with TITAN micropiles



“Additional casing or multi-stage grouting was unnecessary when installing the TITAN micropiles“

Mr. Otto, site manager, SPESA Spezialbau und Sanierung GmbH

In recent years, a remarkable development has taken place in the town of Zehdenick on the River Havel north of Berlin: Thanks to the good transport links to Germany's capital, the town's population has been growing. That in turn has led to an increase in demand for childcare facilities, one of which is this new pre-school unit on the Liebenwalder Ausbau road.

The challenge

The subsoil at the site of the new pre-school facility is highly variable, which means the permissible bearing pressure is severely limited. With fill material and peat in places, it is hardly suitable as a foundation any new building work. The engineers for this project saw ground stabilisation measures as essential and therefore opted for a foundation solution with micropiles.

The solution

The new centre is founded on TITAN 73/56 micropiles from Ischebeck. More than 100 of these micropiles, 9 to 12 m long, were installed by drilling them into place and then grouting them immediately afterwards. This type of foundation overcomes the need for measures to allow for the differential settle-

ment of the heterogeneous soil strata. The site manager of Roßwein-based specialist civil engineering contractor SPESA Spezialbau & Sanierung GmbH, Mr. Otto, sums up the advantages: “Additional casing or multi-stage grouting was unnecessary when installing the TITAN micropiles.” The three-in-one function of the micropiles drilling rod, injection tube and permanent reinforcement plus the easy installation adds up to good economics. Each micropile is fitted with a sacrificial drill bit and drilled into the ground. Radial jets from the drill bit during drilling and the dynamic grouting process create an interlock between the body of grout and the soil. Therefore, TITAN micropiles are famed for their low settlement.

Zehdenick Local Authority, which approved this project, and the children at the “Sunshine” kindergarten can now enjoy more space and a building that complies with today's standards.

Project:

New kindergarten, Zehdenick, Brandenburg, Germany

Completion:

September 2021

Client:

Zehdenick Local Authority

Contractor:

SPESA Spezialbau und Sanierung GmbH

Products used:

- More than 100 TITAN 73/56 micropiles, vertical, 9 to 12 m long
- Cross-cut bits



The ground slab for the new kindergarten in Zehdenick is founded on TITAN 73/56 micropiles



The TITAN micropiles were installed with pinpoint accuracy from a drilling rig



The cement grout cover assures permanent corrosion protection in accordance with DIN EN 14199



The nature of the subsoil called for the use of cross-cut drill bits

Would you like to find out more about TITAN micropiles?

We would be happy to advise you about your project. Simply get in touch with us. We look forward to hearing from you.