Project Owner:

Deichverband Osterstader Marsch

Client:

Thieling Bau GmbH

Quick Info:

In the course of the enlargement of the Weser dike near Rechtenfleth, the existing sluice building had to be extended. Due to new service loads, additional tie-back anchors were required.

Technical Information:

System: TITAN-Micropile 127/103

and 103/78

Quantity: 32 pcs.

Length: 33,00 – 34,50 m Service Load: up to 1550 kN

Technique: self-bore rotary percussive

flush drilling

Building Ground: densely packed sand Time Frame of Works: July – November 2010



Image 1

In the course of the enlargement of the Weser dike near Rechtenfleth, the existing sluice building had to be extended. Due to new service loads, additional tie-back anchors were required. In this project, a new bank wall was erected in front of the existing one. In the first work section, we supported the old bank wall with TITAN anchorpiles, which we placed right in between the driven piles grid.

In the second building section to the north a new bank wall was constructed, which we were able to secure directly with our TITANpiles. The micropiles were drilled and grouted into densely packed sands.



Image 2



Sluice Building Harbour Rechtenfleth

Because of the strong and quickly changing tides working from a water pontoon was not possible. Therefore, we carried out our works with a light drill rig, type KW 2000, from a work platform hanging from a telecrane (see Image 1 and 2). Another specialty in this project was that due to a statement by Prof. Dr. Ing. L. Wichter the new steel tendon TITAN 127/103 (former 127/111) could be installed with consent of the project owner and the inspecting structural engineer.



Image 3