

New construction Berth 10, ferry port



As member of a consortium with Colcrete von Essen GmbH Bilfinger Marine & Offshore Systems GmbH (now F+Z Baugesellschaft) was awarded the contract to build the heavy load quay "Berth 10" of the Ferry Port Sassnitz/Mukran.

The quay wall of the ~110 m long berth consists of a combined tube pile wall. In the context of an alternative bid by Bilfinger, the quay wall cross-section was optimised, so that supporting tubes Ø1450 x 16 [mm] with triple intermediate piles (tmin = 10 mm) were used. In order to transfer the high anchor loads, inclined steel piles (HTM 600/136) were rammed using a swinging leader. They were anchored in the top of the tube pile wall.

Key features of the contract:

- Construction of a quay complex as a pile wall with an integrated platform for heavy loads on the land side
- Quay equipment like ladders, fenders, barge mooring fixtures and double bollards, fender system etc.
- Backfilling and dredging of the berth
- Creation of a slope stabilization at the end of the quay wall

Contract Value:
~ 4,6 € Mio

Executed by:
Bilfinger Marine & Offshore Systems GmbH
Now: F+Z Baugesellschaft

Client:
Fährhafen Sassnitz GmbH

Construction Period:
May 2016 bis May 2017

Site:
Sassnitz

Technical data / Main Quantities:

Tube piles	600 t
Intermediate piles	140 t
Inclined piles	33 pcs.
In.situ concrete piles	65 pcs.
Concrete	approx. 1.400 m ³
Reinforcement steel	approx. 200 t
Soil transfer	approx. 32.000 m ³



REFERENZ HARBOUR CONSTRUCTION AND MARINE ENGINEERING

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As the place is designed to be a transshipment location for the offshore industry, the design had to account for live loads of 200 kN/m². Therefore, a buried 80-cm-thick shielding plate was designed to reduce loads on the quay wall. This superstructure is founded on driven in-situ concrete piles. Due to high live loads of over 5500 kN, the concrete structure and the concrete piles have been reinforced accordingly.

