

LNG terminal in Swinoujscie in Poland

Aarsleff has constructed a 3-kilometre-long breakwater



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In cooperation with German Hochtief, Dutch Boskalis and the Polish company Doraca, Aarsleff has constructed a 3-kilometre-long breakwater in Swinoujscie in the north-western Poland. The breakwater was established for the construction of a Liquefied Natural Gas (LNG) terminal, and Aarsleff participated in the piling, concrete and rock work.

3,000-metre-long breakwater

The project was carried out for the client Maritime Office in Szczecin, and supervision of the project was performed by Grontmij. The breakwater consists of a rock core, filters and a protective layer of 28,840 Xbloc® concrete armour units. On the inner side of the breakwater, we drove a 2-kilometre-long combi wall of DN1220 mm pipes in lengths of up to 29 metres serving as access road and installation site together with the concrete superstructure. The retaining wall is anchored by 37-metre-long inclined piles driven with an inclination of 1:1.

During the construction period, several jack-up platforms served as work platforms for the piling

work. In addition, we had several piling rigs and a large number of barges and not least a number of spud barges from which we placed the rock material and the Xbloc® concrete armour units. The rock material for the project was imported from Sweden and Norway, and the concrete armour units were cast by Aarsleff's branch in Poland as a sub-contract for the consortium.

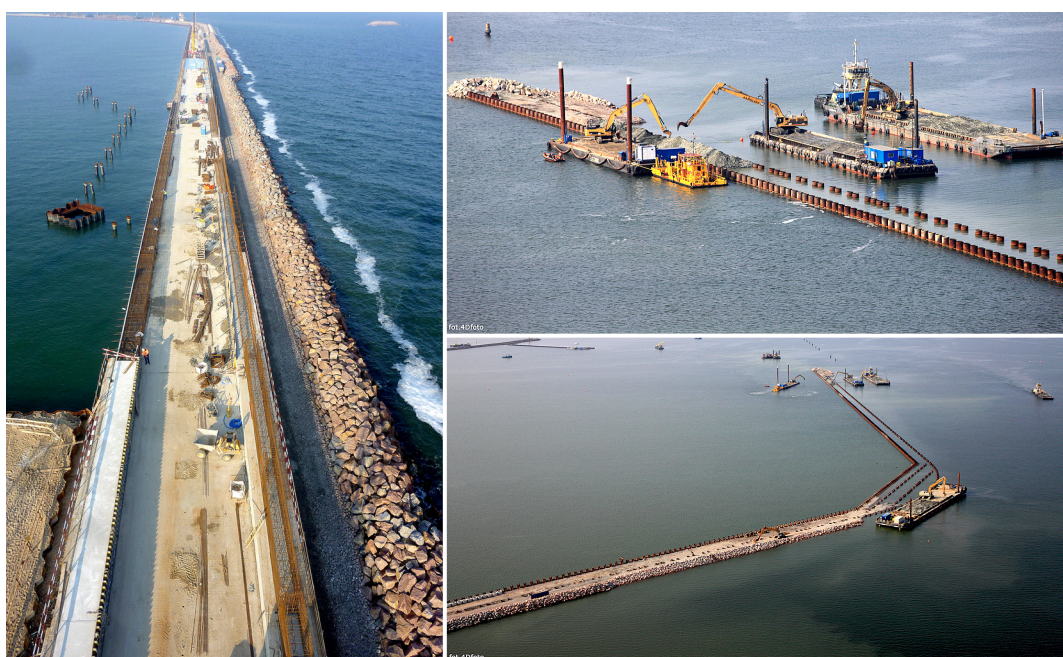
350-metre-long outer pier

In addition to the 3-kilometre-long breakwater at water depths ranging from 0 metres at the beach to 19 metres at the pier head, a 350-metre-long outer pier was constructed as wave wall on the western side of the entrance to the new LNG harbour. This new outer pier, called Western Groyne, was built at right angles to the existing eastern pier.

The contract value concerning the construction of the breakwater and the dredging of the harbour amounted to approx. DKK 1.2 billion, and Aarsleff's share of the total project amounted to approx. DKK 400 million or approx. 33 per cent.



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Data

- 3,000-m-long breakwater and a 350-m-long pier to protect the entrance
- 1,550,000 tons of rock material
- 62,000 m³ of concrete for the protective layer (28,840 Xblocs and 2,921 Tetrapods)
- 21,000 tons of tubular steel pipes, sheet piles and anchors
- 91,000 m³ of concrete for the superstructure and wave wall
- 8,260,000 m³ of dredging
- 947 ground anchors.

Client

Urząd Morski w Szczecinie
(Maritime Office Stettin)

Type of contract

Main contract

Joint venture

Per Aarsleff A/S
Boskalis International bv
Hochtief Construction AG
Korporacja Budowlana Doraco
Sp. Z.o.o.

Construction period

May 2010 to February 2013

Contract value

DKK 1.2 billion

Contact

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