



Container Terminal Gdansk

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Abstract

Poland is a growth nation and since joining the European Union this rate of growth has increased as indeed it has throughout all of Eastern Europe. The continuously growing movement of goods in the Baltic States is testimony to the region's growing economic market.

These prospects are the main reason for the British consortium DCT Gdansk to construct the Baltic Sea region's largest privately financed container terminal in Gdansk. The new terminal is meant to turn the historic hanseatic city into a hub for merchandise traffic in Eastern Europe. To attain this goal, more than a hundred million euros are invested into constructing the deep-sea harbor and into building a container terminal.

The construction part of this ambitious project is in the hands of two units of HOCHTIEF Construction AG: Civil Engineering and Marine Works (CEM) and HOCHTIEF Polska.

New dimensions in the field of logistics

HOCHTIEF Construction and its contractual partners accomplish a whole set of outstanding feats to make Gdansk Harbor fit for the future with increasingly large container vessels.

The main feature of Poland's biggest future deep-sea harbor is the pier. From the coastline, it will project some 800 meters into the Baltic Sea. The newly created land measures some 44 hectares. Five million cubic meters of seabed have to be moved for this purpose. The new logistics area will be enclosed by a 650-meter long quay wall on the harbor side and an approximately one-kilometer long sheet pile wall on the seaside. The quay wall is designed as a sheet pile wall combining load-bearing elements (DB HZ 775 up to 28.5 meters long), fill elements DB AZ 25 and so-called flap anchors. The sheet pile wall on the sea side is back-anchored and consists of elements of types AZ 36-700 to AZ 19. Driving elements of this dimension have never been used before in Poland.

In addition to construction of the terminal, the project also includes construction of the logistics area onshore and the infrastructure connection into the hinterland, complete with access roads, railway tracks and all utilities. On land, the terminal and its administrative buildings, workshops, storage halls, transformer building and gates occupy 190,000 square meters of space. A future road and a railway link - each approximately two kilometers in length - will connect the terminal to the existing infrastructure.

Before reclamation of the new land could start, the construction site had to undergo extensive preparation and be cleared from dud shells and other remains from the Second World War. There were also some positive highlights: historic windlasses and a pipe from the 17th century, all of which were handed over to the city's Shipping Museum.

International cooperation

The smooth progress of the planning and execution process is accomplished by the successful cooperation of our local business unit and the Hamburg-based competence center Civil Engineering and Marine Works. In addition, HOCHTIEF Consult Marine Works helped to optimize the original design by submitting special proposals.

The paper shows a general overview about the project, the design and the construction of the Container Terminal in Gdansk.